MEDICAL WORLD NEWS

AUGUST 18, 1961

Congressman John E. Fogarty

HEALTH SPOKESMAN IN THE HOUSE

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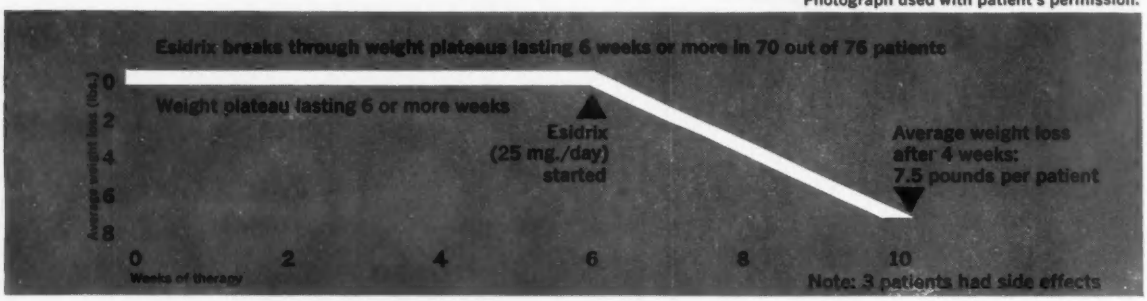
Photograph used with patient's permission.



(Adapted from Einhorn and Kalb[2])

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For complete information about Esidrix and Esidrix-K (including dosage, side effects, and cautions), see Physicians' Desk Reference, or write CIBA, Summit, N. J.

References: 1. Ray, R. E.: To be published. 2. Einhorn, H. P., and Kalb, S. W.: Clin. Med. 7:1995 (Oct.) 1960.

Supplied: ESIDRIX Tablets, 25 mg. (pink, scored) and 50 mg. (yellow, scored). ESIDRIX-K Tablets 25/500 (white, coated), each containing 25 mg. Esidrix and 500 mg. potassium chloride. **NEW STRENGTH ESIDRIX-K NOW AVAILABLE:** ESIDRIX-K Tablets 50/1000 (white, coated), each containing 50 mg. Esidrix and 1000 mg. potassium chloride.

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VOL. 2, NO. 17

MEDICAL WORLD NEWS

THE NEWSMAGAZINE OF MEDICINE

AUGUST 18, 1961

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On the cover: Rep. John E. Fogarty (D-R.I.), chairman of the House Subcommittee on Health Appropriations, plays a key role in the massive expansion of medical research under Federal auspices. Story on p. 26.

Departments

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LATEN

POLIO VACCINE PRODUCERS CALL TEMPORARY PRODUCTION HALT

Two of the five producers of polio vaccine have halted production, probably for several weeks, in order to remove a simian virus from the monkey kidney tissue on which vaccine viruses are grown.

The virus, discovered last year by Dr. Maurice Hilleman of Merck Sharp & Dohme (MWN, July 1, 1960, "Polio Progress Faces a Problem") is not known to affect man. But it does cause cytopathic changes in kidney cell cultures of some species of monkeys, and the manufacturers (Merck, and Parke-Davis) want to take no chances. Although the two companies turn out about 25 per cent of the nation's Salk vaccine stock, the temporary halt in production is not expected to cause any shortage. Nor will any vaccine already in doctors' hands be recalled. According to the Public Health Service, no vaccine was released in the past two months unless it had been found free of simian virus.

CANADIANS TURN UP NEW PARATHYROID HORMONE

The parathyroid gland, long known to control blood calcium, appears to do its job with two hormones, not one, says a Canadian physiologist.

Dr. D. H. Copp, of the University of British Columbia, finds that the gland secretes a substance which lowers calcium levels in the blood—thereby acting as an antagonist to the "regular" hormone, which raises them.

The Canadian investigator and two co-workers turned up evidence pointing to the new hormone in the course of studies seeking to clarify the parathyroid gland's mode of action, a matter long in dispute. They set up a perfusion system whereby the gland's blood supply could be rendered hyper- or hypocalcemic without changing systemic calcium levels.

The results, says Dr. Copp, indicate that hypercalcemia does more than merely suppress production of the parathyroid hormone—as had been previously assumed. It also stimulates the glands to produce the antagonist. Dr. Copp describes this substance, which he has christened calcitonin, as "fast-acting and short-lived."

The two hormones, he believes, appear to hold blood calcium at normal

levels by "push-pull feedback." Hypocalcemia stimulates production of the regular hormone, which lifts blood calcium toward normal levels. As the blood calcium rises, the faster-acting calcitonin comes into play, preventing "overshoot."

Dr. Copp suggests that the dual mechanism "may offer an interesting analogy to the control of blood sugar by insulin and glucagon." It would account for the body's precise control of blood calcium and for the absence of oscillation in calcium levels despite attempts to raise or lower them.

RIB SYNDROME CALLED 'MOST COMMON CAUSE OF CHEST PAIN'

The diagnosis of subacute Tietze's syndrome is neither taught in medical schools nor printed in the usual medical textbooks. "Yet," declares a Tennessee physician, "it appears to be the most common cause of chest pain seen in the doctor's office today."

Tietze's syndrome, noted by the appearance of nonsuppurative chest nodules, evolves in some cases from an acute injury to the rib junction or costal cartilage, reports Dr. Maurice Rawlings, Chattanooga, Tenn.

Sometimes, he adds, the syndrome occurs in a diagnostically deceptive subacute form which "too few seem to recognize."

Thus only when they are questioned closely about their medical history do some patients with Tietze's syndrome reveal that they had unexplained attacks of pain, symptomatic of heart or respiratory disease, several months to a year before the nodules developed.

These patients go from one doctor to another because the subacute form characteristically mimics severe disorders and foils not only the patient, but the physician, he notes.

The physician can easily put his finger on the trouble, he says, discussing a study of 30 patients with the subacute form. The simple diagnosis "is confirmed when point tenderness over the involved rib junction or cartilage structure exactly reproduces the patient's complaints."

The condition, which may occur in anyone, is "due to cryptic injuries or occupational strains." Especially prone are window washers, assembly line workers and housewives.

BRITISH GOVERNMENT RAISES FEES FOR 'FREE' HEALTH CARE

Faced with the rising costs of supplying medical care, Britain's Tory government has just raised by 12 cents the worker's weekly fee for "free" health service and other benefits.

This raises the payment from $1.37 to $1.49 a week (about one-seventh of which goes to the National Health Service). The government also doubled the 14 cents per prescription fee, raised the price of false teeth from $12 to $14, and boosted the cost of eyeglasses by about 70 cents a pair (new price: $4.30 to $6, depending on type).

None of these items has been given free since 1951. Orange juice, cod liver oil and vitamin tablets, obtained free or at a nominal charge until this year, will now be sold at cost.

Major reason for the new charges is that the cost of National Health Service, which was $1.2 billion in its first year of operation, has almost doubled in the 13 years since then. It reached $2.2 billion in the fiscal year just ended. This total, an increase of 13 per cent over last year, is about 14 per cent of all government spending.

Says Tory Health Minister Enoch Powell regarding the new charges to Health Service recipients: "The alternative to these measures is a limitation of expansion of the Health Service."

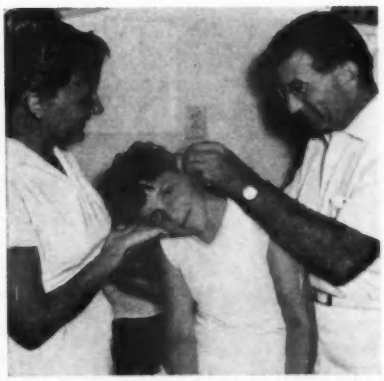
STARLINGS FOUND TO BE SOURCE OF HISTOPLASMOSIS

Starlings are more than pests. They apparently contribute importantly to histoplasmosis in some places.

Dr. Chester W. Emmons, one of the leading authorities on the disease, reports he has succeeded in isolating Histoplasma capsulatum from ten out of ten soil samples taken from a Washington park which is a favorite nighttime gathering place for thousands of starlings. In Dr. Emmons' view, the finding confirms "in a dramatic manner" the opinion that roosting birds may play an important role in the epi-

CONTINUED ON PAGE 6

CAMP PHYSICIAN SOLVES 'SWIMMER'S EAR' PROBLEM



PROPHYLAXIS is given on the scene. Non-antibiotic drug is also used for therapy (r.)

Among the many medical problems of summer, especially at camps, few are as bothersome as otitis externa—or swimmer's ear. Dr. Theodore Struhl, a Miami surgeon, has solved the prophylaxis problem at Florida's Camp Ocala, of which he is co-owner.

At the end of each swimming period, camp counsellors administer non-antibiotic ear drops (*VōSoL* Otic Solution, Wampole), which Dr. Struhl says are bactericidal in 30 seconds against Pseudomonas, Proteus, Staphylococcus aureus, Streptococcus pyogenes and Diplococcus pneumoniae.

"Until we instituted prophylactic measures, we had an incidence that in some years reached 80 per cent," he notes. Since the program began, incidence has been limited to about five or six cases in an eight-week season.

The drops, he adds, are non-stinging. And since they are administered right after swimming, there is no particular sensation of moistness in the ears; they're already wet.

demiology of urban histoplasmosis.

The disease is widely prevalent in the U.S. and can sometimes be fatal. For the most part, however, it has been thought to be associated with chicken coops and farms. Even urban cases have been believed to be connected with rural experiences or, in the view of some authorities, with pigeon droppings. Some writers have even suggested that the disease does not occur to any degree on the eastern seaboard.

Dr. Emmons, of the National Institute of Allergy and Infectious Diseases, said he believes his findings confirm that birds may be an important source of the disease in cities, but that they do not support the pigeon thesis. He thinks that this idea developed because of a cross reaction between Histoplasma and Cryptococcus neoformans, which *is* associated with pigeons.

Dr. Emmons also cites his own soil isolations and other extensive data —to argue that histoplasmosis is "a frequent disease in Washington and surrounding areas." Earlier, Dr. Emmons and Dr. John P. Utz, also of NIAID, reported that a new Hoffmann-La Roche antibiotic (X-5079) is effective against histoplasmosis and other mycoses. (MWN, April 14).

DOCTOR QUESTIONS LINK BETWEEN INSURANCE AND HOSPITALIZATION

Are insured patients playing fast and loose with hospitalization privileges? A leading medical administrator maintains that nobody really knows. The problem, he thinks, may be "greatly exaggerated."

Dr. Russell A. Nelson, director of Johns Hopkins Hospital, Baltimore, doesn't deny the reality of the hospital utilization problem.

He admits, for example, that some doctors are sometimes pressured into hospitalizing patients so that an insurance program, not the patient, will pay the bill. But the degree to which the practice adds to a hospital's money problems is difficult to determine. "What one is measuring after all," says Dr. Nelson, "is the judgment of the physician."

And the Hopkins director still has to be convinced that a deductible clause—under which the patient, for instance, pays the first $50—really discourages anybody from entering a hospital. "There just aren't statistics enough to prove this point one way or the other."

In a speech to the Health Insurance Association meeting in New York, Dr. Nelson claims that the main pressure for over-utilization comes from cases requiring diagnostic services. His prescription: "Change insurance policies so they cover diagnostic work done outside the hospital."

Dr. Nelson adds, however, that whether insurance underwriters take this advice or not, hospitals themselves must continue to trim patient loads as intelligently as they know how. Utilization committees, he says, must work even harder at the job of screening admissions, lengths of stay and discharges.

ATHLETE'S FOOT NOW CALLED A BACTERIAL, NOT FUNGAL, DISEASE

Athlete's foot, long thought to be fungal in origin, may actually be caused by bacteria.

Evidence for the new etiological theory, described by a team from the University of Miami School of Medicine, includes successful culture of a gram-positive bacillus from erythrasma scales and successful treatment of the disease with antibacterial, rather than antifungal, antibiotics.

"Complete and prompt clearance of erythrasma affecting the trunk and limbs, following systemic administration of erythromycin, chloromycetin and tetracyclines, was observed in 16 patients treated so far," report Drs. Imrich Sarkany, David Taplin and Harvey Blank in the *Journal of the American Medical Association.*

Systemic treatment with erythromycin, which "appears to be the drug of choice," clears up refractory cases with histories as long as 25 years.

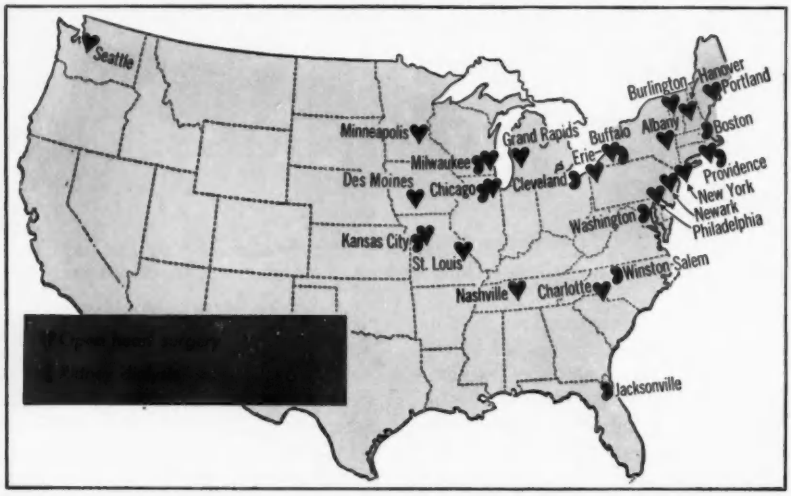
NEW ISOTOPE MAY REPLACE I ^{131} IN SPECIAL DIAGNOSTIC TESTS

Iodine-125 is challenging the supremacy of I^{131} for use as a diagnostic agent, according to Dr. Paul V. Harper and associates of the Argonne Cancer Research Hospital, University of Chicago.

Produced at Argonne, I^{125} is safer, partly because it requires less shielding. More important, perhaps, is that it produces approximately the same radiation dose with a 60-day half life as I^{131} does with an 8-day half life. Hence, the subject receives less radiation per unit time, and most of the I^{125} can be removed from the body before decay, Dr. Harper told the Society of Nuclear Medicine in Pittsburgh.

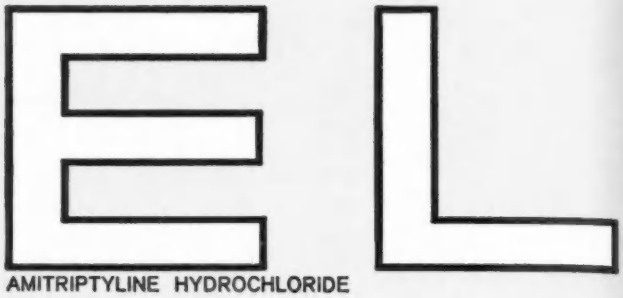
It produces thyroid scans of equal quality, he says, and is superior for use in liver scans.

NEW HEART-LUNG AND KIDNEY DIALYSIS CENTERS



Twenty-nine more cities can now offer open heart surgery and kidney dialysis through grants from the John A. Hartford Foundation, Inc. of New York. The Foundation reports it appropriated $9,042,000 for heart and kidney disease research and care in 1960. Of this, $8,353,000 went for support of the centers shown on the map.

new...a potent antidepressant with effective anti-anxiety properties



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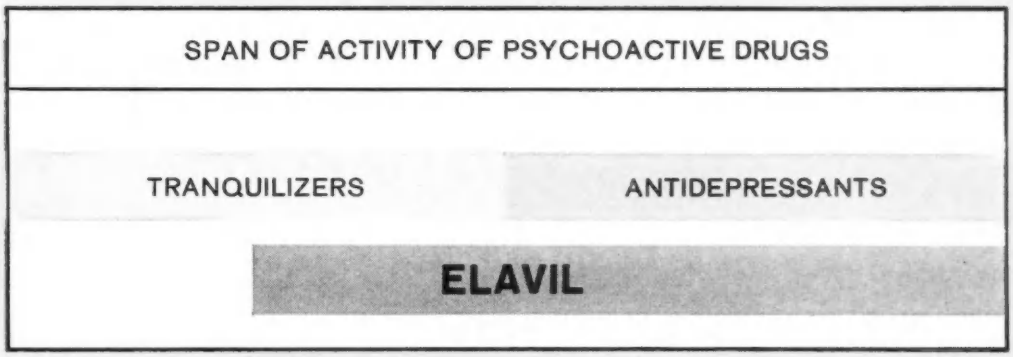
	TARGET SYMPTOMS OF DEPRESSION:			
Class of compounds	*Anxiety*	*Insomnia*	*Depression*	*Over-all relief of symptoms*
TRANQUILIZERS	"Failure of the tranquilizers to produce satisfactory results is due in many cases to their being prescribed for depression, especially depression masked by the more prominent symptoms of anxiety. The underlying depression may be deepened."[1]			+ −
ANTIDEPRESSANTS			"CNS stimulants and anti-depressants, if given to anxious patients, will increase the anxiety...."[1]	+
ELAVIL	"... this drug [ELAVIL] acted both as a tranquilizer and as an anti-depressant...."[2] Many physicians customarily treat anxious or depressed patients with a combination of an antidepressant and a tranquilizer. This is seldom necessary when prescribing ELAVIL because it has both antidepressant and anti-anxiety properties.			++

AVIL®

effective in patients with depression...
particularly useful in those with predominant symptoms of anxiety and tension...provides prompt relief of anxiety and insomnia associated with depression



INDICATIONS: manic-depressive reaction – depressed phase; involutional melancholia; reactive depression; schizo-affective depressions; neurotic depressive reaction; and these target symptoms: anxiety; depressed mood; insomnia; psychomotor retardation; functional somatic complaints; loss of interest; feelings of guilt; anorexia. May be used whether the emotional difficulty is a manifestation of neurosis or psychosis,[4] and in ambulatory or hospitalized patients.[3, 4, 5]

USUAL ADULT ORAL DOSAGE: Initial, 25 mg. three times a day, until a satisfactory response is noted. Many patients improve rapidly, although some depressed patients may require four to six weeks of therapy before obtaining maximum benefit. In severely depressed patients, as much as 150 mg. per day may be given. **Maintenance,** 25 mg. two to four times a day. Some patients may be maintained on 10 mg. four times a day. The natural course of depression is often many months in duration. Accordingly, it is appropriate to continue maintenance therapy for at least three months after the patient has achieved satisfactory improvement in order to lessen the possibility of relapse, which may occur if the patient's depressive cycle is not complete. In the event of relapse, therapy with ELAVIL may be reinstituted.

ELAVIL is not a monoamine oxidase (MAO) inhibitor. No evidence of drug-induced jaundice or agranulocytosis has been noted. Side effects (drowsiness, dizziness, nausea, excitement, hypotension, fine tremor, jitteriness, headache, heartburn, anorexia, increased perspiration, and skin rash), when they occur, are usually mild. However, as with all new therapeutic agents, careful observation of patients is recommended. As with other drugs possessing significant anticholinergic activity, ELAVIL is contraindicated in patients with glaucoma.

SUPPLY: Tablets, 10 mg. and 25 mg., in bottles of 100. **Injection** (intramuscular), 10 mg. per cc., 10-cc. vials.

REFERENCES: 1. Perloff, M. M., and Levick, L. J.: Clinical Med. 7:2237, Nov. 1960. 2. Freed, H.: Am. J. Psychiat. 117:455, Nov. 1960. 3. Dorfman, W.: Psychosomatics 1:153, May-June 1960. 4. Ayd, F. J., Jr.: Psychosomatics 1:320, Nov.-Dec. 1960. 5. Barsa, J. A., and Saunders, J. C.: Am. J. Psychiat. 117:739, Feb. 1961.

Before prescribing or administering ELAVIL, the physician should consult the detailed information on use accompanying the package or available on request.

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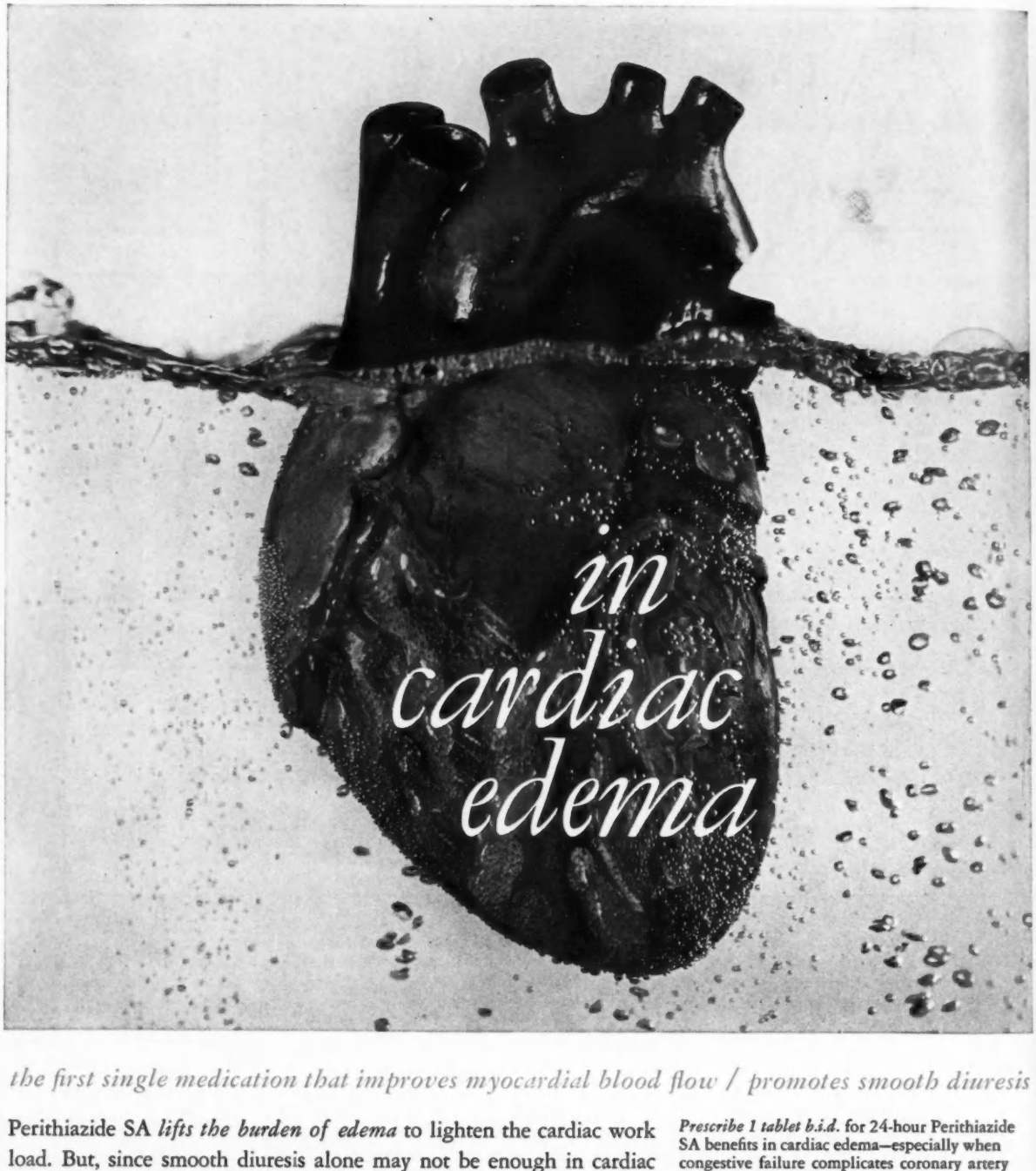

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A LETTER FROM THE PUBLISHER

A great deal of attention has been drawn recently to sending our students abroad on missions of health service, medical practice, and education. So much that I hope we don't forget to keep first things first: namely, the job of attracting our professional men and women to the thousands of small American towns that need qualified medical personnel.

It's all very well to be aware of the medical needs of Leopoldville, Karachi, or Ankara (in fact, we've devoted many pages of MWN to this very subject) so long as we don't in the process ignore the problems of Watertown, Centerville and Little Falls.

Typical of the American scene in my youth was the steady stream of young boys from the farm seeking fame and fortune in the big cities. But maybe that's changing. Maybe the great surge of people to the metropolitan centers has begun to reverse itself. When I was a young New York newspaper man, I discovered that many of my fellow reporters were from Missouri, Mississippi, Nebraska and other distant states. My two closest associates, in fact, were from a potato patch in Maine and a fishing village in Florida.

Now the tide seems to be turning. My own former personal physician, once a "Park Avenue specialist," has exchanged his polished brass shingle for life in a Florida town. And just this summer, on a visit to Maine, I ran into a young doctor who is dedicating his life to a small seaport village of one or two thousand people. Imagine my delight to learn that he had grown up in the heart of New York City and had taken his medical training at Bellevue Hospital in Manhattan.

I've inquired around, and I've learned of many laudable efforts to attract young physicians to small town practices. Private foundations are lending money to medical students and young doctors at interest far below commercial rates; the AMA, the Association of American Medical Colleges, and several pharmaceutical houses have various programs specifically aimed at finding doctors for country towns which need them; certain state medical schools are exchanging greatly reduced tuition for the promise of a small town practice within the state; and other states are now setting up new medical schools to attract more doctors locally.

Let's hope that we continue to find the energy and resources to prolong and intensify such efforts, and that we appropriate to these worthwhile projects a small part of the billion or more dollars the Federal Government now spends on medical care and research. Surely tomorrow's physicians right here in America are worth as much thought and financial aid as are those we help in South America, or Africa, or Asia, especially so if they're on their way to serving small-town, doctor-hungry communities.

M M Geffen

Publisher

OUTLOOK

- **Full-scale study of phenylketonuria to be launched**
- **Drug makers will spend $227 billion for research**

U. S. Customs inspectors are withholding final appraisal of tetracycline tablets and capsules from Italy, pending an investigation of whether the antibiotic is being dumped in the U. S. at cut-rate prices. If the Treasury Department decides this is happening, the case will be turned over to the Tariff Commission to see whether higher duties are needed to protect U. S. producers.

The drug industry will spend more money than ever this year for research and development, according to a survey made by the Pharmaceutical Manufacturers Association. This year's $227-million expenditure is 276 per cent more than the $60 million pharmaceutical firms spent ten years ago. Of the total outlay this year, says the PMA, almost $23 million will be disbursed outside the industry in the form of either contracts or grants to medical schools, hospitals, clinics, laboratories, physicians and consultants.

More than $1 million has been set aside by the National Institutes of Health to support a seven-year epilepsy research program to be carried out at the University of Wisconsin. Dr. Francis M. Foster, chairman of Wisconsin's department of neurology, will direct the studies with help from seven UW specialists.

If the United Auto Workers Union has its way, General Motors will assume full responsibility for all hospital-medical insurance carried by its 350,000 workers instead of paying just half the bill. In pressing for a new contract before the present one expires at the end of this month, the UAW is trying to get auto makers to follow the lead of the steel industry in shouldering the full cost of hospital insurance. General Motors calculates the cost at $86 million a year.

What's believed to be the first paperback book on birth control will go on sale in drug stores and supermarkets in September. Entitled "The Complete Book of Birth Control," by Dr. Alan F. Guttmacher, director of obstetrics and gynecology at New York's Mt. Sinai Hospital, it covers all current methods, including standard medical techniques, the new pills and the rhythm method. Published by Ballantine, the comprehensive book will sell for fifty cents.

The first long-range study into the effects of phenylketonuria is being organized by the Children's Bureau of HEW. In cooperation with the existing clinical programs for the mentally retarded, the Bureau hopes to develop information on how much difference there is in the condition of children with PKU detected immediately after birth, several weeks later or in early childhood. It also hopes to come up with reliable data on how long a special low phenylalanine diet is needed.

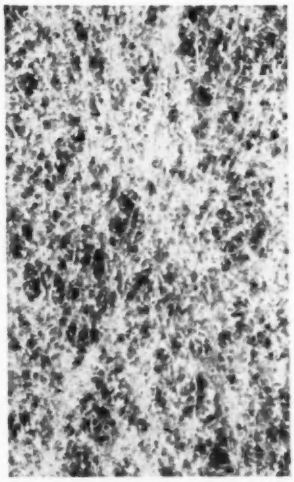
President Kennedy has sent to Congress draft legislation to establish a National Institute of Child Health and a National Institute of General Medical Sciences within the National Institutes of Health. The President says the new establishments are needed to increase U. S. research into child health—long a matter of concern to the Kennedy family—as well as into the basic medical sciences.

Doctors are being asked to join with parents and educators in discouraging teenagers from smoking. The AMA and the National Education Association, in a joint statement, point out that "accumulating evidence suggests deleterious health effects from smoking and no evidence of any beneficial effects." The two Associations recommend "prevention at ages prior to the usual beginning of the practice."

Beginning in January of 1962, the American Chemical Society will launch a new publication to be called "Bio-Chemistry." The new bi-monthly is to be edited by Professor Hans Neurath, executive officer of the biochemistry department at the University of Washington School of Medicine.

MEETINGS

Aug. – Sept.	26 – 1	Int'l Congress on Radiology, Montreal
Aug.	27	American Association of Electromyography and Electrodiagnosis, Cleveland
Aug.	27-29	Northwest Proctologic Society, Sun Valley, Idaho
Aug. – Sept.	27 – 1	American Institute of Biological Sciences, Joint Meeting, Lafayette, Ind.
Aug. – Sept.	28 – 1	American Congress of Physical Medicine and Rehabilitation, Cleveland
Aug. – Sept.	30 – 2	Pacific Dermatologic Association, Inc., Salt Lake City
Aug. – Sept.	30 – 5	Int'l Congress on Mental Health, Paris
Aug. – Sept.	31 – 2	International Congress of Exfoliative Cytology, Vienna



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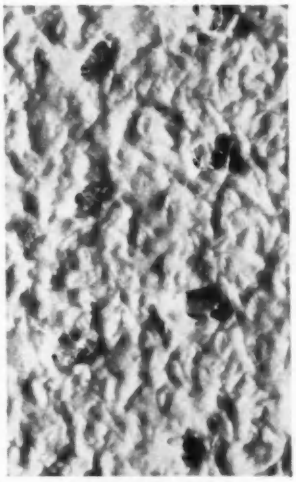
Macrophoto of "SCOTCH" Surgical Tape shows exclusive microporous structure of the physiologically inert adhesive and non-woven backing. Air passes through the tape freely — perspiration and exudates evaporate rapidly.



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In contrast, conventional, non-porous tape has a thick layer of adhesive which forms an occlusive barrier that plugs the widely spaced perforations, entraps hairs and contains potentially irritating natural rubbers and resins.

TAKE A CLOSE LOOK AT A TOTALLY NEW CONCEPT IN SURGICAL ADHESIVE TAPE

Over three years in development, "SCOTCH" Brand Surgical Tape dramatically answers the traditional problems of ordinary adhesive tape, as established by clinical test in more than 1000 cases. (Golden, T., A Non-Irritating, Multipurpose Surgical Adhesive Tape, Am. J. Surg. 100: 789, 1960.) **Non-occlusive:** prevents usual maceration. Cool, lightweight, comfortable. Easy to tear, handle, apply. **Physiologically inert:** Virtually eliminates chemical irritation, even in markedly tape-sensitive patients. **Easily removed:** Thin, non-creeping copolymer adhesive removes without depilation, yet outholds all previous tapes. Sticks even in baths; requires fewer changes. **Available now:** order through your surgical supply dealer or pharmacy in usual widths, ½" to 3", 10-yard rolls.

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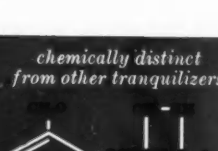
LEDERLE INTRODUCES A NEW TRANQUILIZER

chemically distinct from other tranquilizers



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Mephenoxalone Lederle

TO RESTORE THE NORMAL PATTERN OF EMOTIONAL RESPONSE

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Complete information on indications, dosage, precautions and contra-indications is available from your Lederle representative, or write to Medical Advisory Department.

Average adult dosage: One 400 mg. tablet, four times daily.

Supplied: Half-scored tablets 400 mg. TREPIDONE Mephenoxalone, bottle of 50.

LEDERLE LABORATORIES, A Division of AMERICAN CYANAMID COMPANY, Pearl River, New York

MEDICAL WORLD NEWS
August 18, 1961 Vol. 2, No. 17

ELECTRONICS BOOM SPREADS TO MEDICINE

International conference hears 299 reports on devices ranging from an automatic sphygmomanometer to a mechanized dispensary

On opening day of the 14th annual Conference on Electrical Techniques in Medicine and Biology in New York, the head of the nation's oldest medical electronics department gave physicians a capsule version of the striking growth in this new field.

In 1947, said the University of Pennsylvania's Dr. Herman P. Schwan, about 30 papers were presented. At this year's meeting, held jointly with the Fourth International Conference on Medical Electronics, there were 299 papers.

"This is symptomatic of the rapidly growing field of electronics in medicine," pointed out Dr. Schwan, who suggests that this is really only the beginning.

A subcommittee on Government operations, he noted, has been gathering information from many experts, including conference participants, concerning ways in which the U.S. Government's interest and activity in this field could be extended from the $3 million spent last year in grants for research and training, to as much as $3 billion.

What is it that electronics has to offer medicine? Dr. Alfred N. Goldsmith, one of the pioneers and noted inventors in the American electronics field, had an answer: speed of operation, precision of data, memory storage and access, multiple display of data, computation evaluation, classification and control.

"But in no sense does it replace the skill and scope of the physician," he emphasized. "There is no reduction in the demand on him for good judgment and appropriate decisions. Electronics," he summed up, "provides knowledge, but man provides wisdom."

A surfeit of samples of this combination of knowledge and wisdom were displayed at the annual electronics session, including these:

▸ More accurate measurement of blood pressure than is possible with the application of the standard sphygmomanometer, stethoscope and human ear. Many semi-automatic and even fully automatic devices to determine blood pressure have been developed, but none have been widely used—an indication that a practical, reliable and accurate device has yet to be made, said Thomas I. Marx of the Midwest Research Institute, Kansas City, Mo.

As a possible answer, engineer Marx and associate B. R. Baldwin described a fully automatic sphygmomanometer that employs an entirely new method of sensing the diastolic endpoint.

A double-cuff assembly is applied to the arm and slow inflation started. Pulses appearing in the distal cuff are electronically subtracted from pulses in the proximal or occluding cuff. Above diastolic pressure a slight phase lag appears from the distal cuff, which results in a spike at the output of the difference amplifier concurrent with the ascending wave of the cardiac cycle. The repetition of the different spikes locks a dial manometer at that point—the diastolic pressure. The cuffs are inflated rapidly to greater than systolic pressure, then deflated slowly until pulses appear in the distal cuff. This locks another dial and represents the systolic pressure.

To date, reported Mr. Marx, the device has been tested on 25 subjects and is now undergoing evaluation with hospitalized patients where there are a wide range of pressures, pulse magnitudes and pulse shapes.

PATIENT-WATCHER monitors five parameters.

▸ Gastrointestinal probes guided by magnets. These have been successfully used to decompress patients suffering intestinal obstruction from a variety of conditions, including ileitis and tumors.

The tips of various tubes, such as the Cantor, Miller-Abbott and Levin, were fitted with four magnets, small enough to allow the tube to bend during nasal catheterization. A 14-pound electromagnet is then held outside the patient's body; with careful handling it can be used to draw the tube through the pyloric sphincter. The procedure "can be accomplished in a few minutes," report-

CONTINUED ON PAGE 16

ed H. Philip Hovnanian, manager of the medical science department of Avco Research and Development Division, Wilmington, Mass.

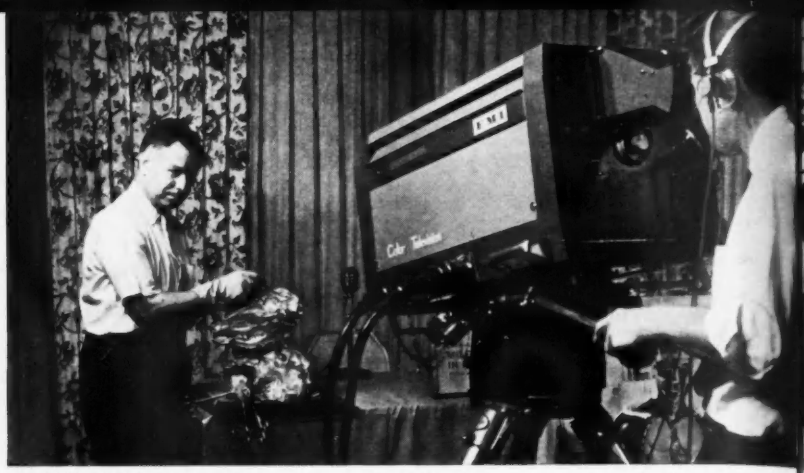
▶ Maximum inspiration used to take a child's x-ray at just the point when he breathes most deeply. This neat solution to a common pediatric problem was devised by Dr. Victor Weidtman of the children's clinic in Koln University, Lindenburg, Germany. He hangs a strain gauge around the infant's abdomen. Since most infants' breathing is of the abdominal type, he noted, the variations of electrical resistance caused by the child's breathing can be amplified and observed on a recorder.

Retakes Almost Eliminated

The technician watches the recorder for a few breaths to get the impression of the individual depth of inspiration and then sets the sensitivity of the device according to the deepest inspiration. The infant's next deep inspiration closes the circuit and the x-ray is taken. Dr. Weidtman has used this device in the Koln clinic for the past year and has succeeded in reducing the need for retakes from ten per cent to "practically zero."

▶ Doctors' orders made less liable to errors and considerably cheaper for the hospital to fill. In a system proposed by Dr. Mark S. Blumberg of the Stanford Research Institute, Menlo Park, Calif., the doctor's order card is prepared at the nursing station in the form of a check list. Dr. Blumberg said that although hundreds of drugs are used throughout a hospital, as few as 20 to 40 different drugs account for 90 per cent of the orders written at a nurse's station. Therefore, he maintains, the check list order form is feasible; in addition, it would eliminate most of the handwritten orders that can be sources of error.

Virtually all the drugs in the hospital would be stocked in a dispensing device at the station, packed in single doses. The dispenser would flash when a dose fell due. With the use of a key, the dispenser would deliver the scheduled drugs labeled with the patient's name and location. A device to match the patient's identification bracelet with a work order card containing the drug would make positive identification easier for the nurse. ■



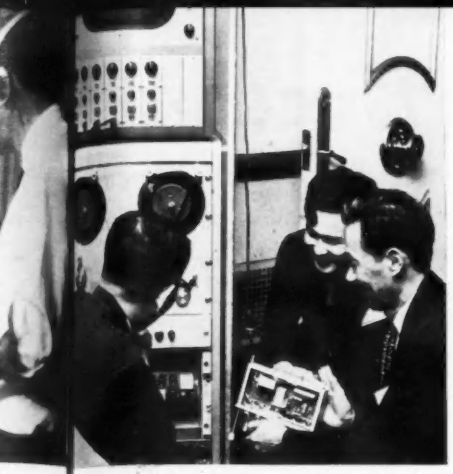
CLOSED CIRCUIT color TV system is specially designed by E. M. I. Electronics to produce high-quality, big-screen pictures under difficult lighting conditions.

$2 MILLION WORTH OF BLIPS AND

Into four medium-sized rooms in New York's Waldorf-Astoria Hotel, exhibitors at the Fourth International Conference on Medical Electronics assembled close to $2 million worth of transistors, transducers, monitors, recorders and other equipment. Closed circuit television sets—in black-and-white and color—flickered busily all day. Everywhere the curious physician turned he saw machines for taking, storing, retrieving and interpreting physiological data. This was then turned into blips of light or squiggled lines on penwriter drums.

A group captain from the Royal Air Force demonstrated a hydraulic analogue of the circulatory system. Two researchers from the Biological Engineering Society showed some radio "pills" that were highly sensitive to temperature changes. Everything was designed to make the physician's automated future simpler, more accurate and less arduous. But some of today's solutions, it appeared, could pose problems for tomorrow. One speaker described how he had spent three years continuously monitoring fetal heart sounds before and during labor, and the neonatal heart immediately after birth. The heart sounds were recorded at 7½ inches per second for storage and could be played at reduced speeds, the better to hear difficult sections. A participant calculated such a series of recordings would fill 6,000 miles of tape. ■

MINIATURIZATION: Hypodermic electrode (l.) continuously monitors blood acidity; "radio pill" (bottom) is swallowed to broadcast pressure, temperature or pH values as it moves along the GI tract.

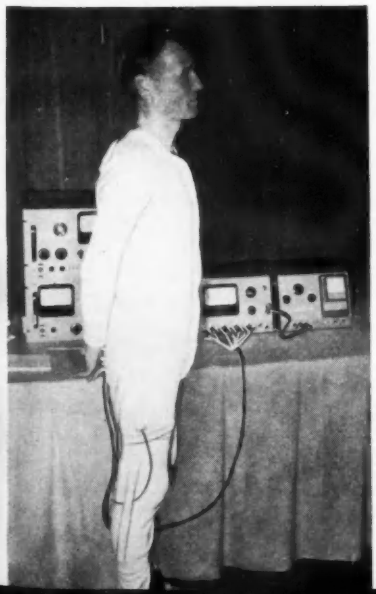


DR. OKINO, of Bowman Gray (l.) talks hardware with two gentlemen of Japan.

BLIP AND BEEPS

RAF GROUP-CAPTAIN Malcolm exhibits analogue of circulatory system.

WIRED LONG-JOHNS measure rectal, skin temperature responses to heat or cold.



PLASMA VISCOSITY IS A SOMETIME THING

Mysteries of circulation may be solved by discovery that blood behavior breaks Newton's law

Blood plasma, like catsup, is a non-Newtonian liquid.

This revelation, which helps explain some heretofore mysterious mechanics of blood circulation, has just been released by a team of physicians and engineers at the Massachusetts Institute of Technology and the Peter Bent Brigham Hospital in Boston.

Newtonian liquid, they explain, keeps the same viscosity no matter how fast it flows. But some liquids do not follow Sir Isaac's mathematical concept; instead, the faster they flow the less sticky they become.

Catsup, for instance, stubbornly remains in the bottle in spite of repeated pounding. Then, unexpectedly, a large amount squirts out—because a "threshold" blow switches the catsup from high to low viscosity.

Blood plasma, long believed to be a substance of the Newtonian variety, now appears to be more in the catsup category: it has a variable viscosity which introduces a constant change in its properties. The faster it flows, the more fluid it is, and vice versa.

The MIT team made this discovery with the help of a super-sensitive instrument for measuring small twisting forces which is used extensively in designing gyroscopes for missiles. Called a GDM Viscometer, the device is so sensitive that it can measure the rotational force exerted by a ten-pound wheel six inches in diameter, making only one revolution per day.

To measure viscosity, the device, containing a tiny rotor, is rigged to a small cup of blood to be tested. When the rotor spins, the liquid transmits torque to the cup—as the blades of an electric food mixer transmit torque to a bowl, making the bowl turn. This torque is a guide to viscosity.

Using this device—developed by MIT electro-magnetic coordinator Philip J. Gilinson, Jr., and engineer Charles R. Dauwalter—the team has also uncovered an answer to a basic question about capillaries.

When blood passes through capillaries, for instance, the red cells line up like stacks of doughnuts. Thus the edges of the cells, where oxygen and carbon dioxide are concentrated, are nearest the capillary walls—an optimum alignment for encouraging gas exchange. Why such alignment occurs has never been clear. Now Dr. Roe E. Wells, Jr., associate in medicine at the Peter Bent Brigham Hospital, and Dr. Edward W. Merrill, associate professor of chemical engineering at MIT, think they know. In simplest terms, this is what happens:

The thin layer of plasma found between the cell edges and the capillary wall would normally be subjected to a fast flow and shear rate. By a mathematical calculation involving speed of flow and the clearance between cells and capillary wall, they find that the viscosity of blood plasma would be about 1.5 centipoise (one centipoise being the absolute viscosity of water — the standard Newtonian fluid). It would be "very liquid," and would lubricate stacks of cells as they pass rapidly through the vessel.

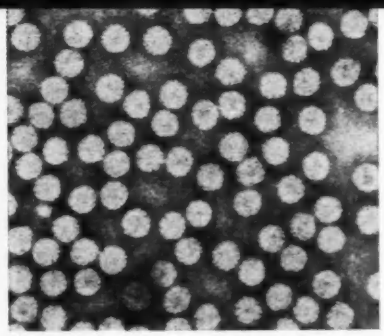
But some plasma is also trapped between the stacks of cells, and since it is almost stationary, its shear rate is about 1,000 times less than the rate along the capillary wall. As a consequence, the MIT scientists point out, the viscosity of plasma leaps to 18 centipoise—so high, in fact, that the plasma becomes almost like a gel, "cementing" the cells in stacks.

They have also discovered some remarkable individual differences in the behavior of plasma samples. In studies on coagulation, for instance, they have found that heparin has a marked effect on viscosity of plasma from some people but very little effect on the plasma from others.

In these and numerous other studies on blood and body fluids, students at MIT work with synthetic blood plasma, attempting to determine which proteins are responsible for its non-Newtonian characteristics; at the same time, students at Peter Bent Brigham try to determine the differences in viscosity between plasmas of several subjects.

Says Dr. Merrill: "We are working like the Huntley-Brinkley team." ■

PORTRAIT OF LITTLEST VIRUS



"SIMPLE" virus is highly organized.

Wisconsin biochemists unveil a close analysis of an organism at the end of life's spectrum

If viruses make up the thin line separating life from non-life, the brome grass mosaic virus (BMV) rightly deserves to be called "the living end." It is the smallest and seemingly the simplest virus known to science.

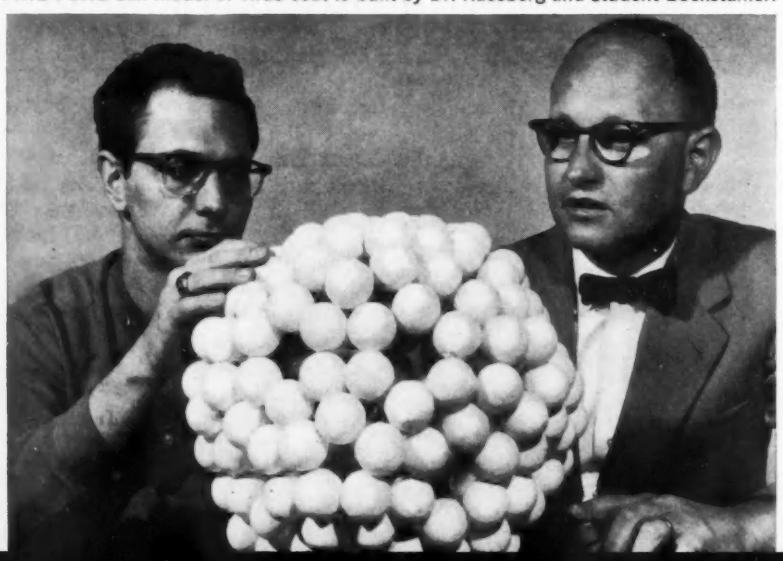
Yet, it is amazingly well organized, according to biochemists at the University of Wisconsin, Madison. Professor J. Kaesberg and graduate student Larry E. Bockstahler, have spent two years gathering data for a "portrait" of this littlest virus, which causes mottling and streaking on the leaves of smooth brome grass, a common prairie grass.

Knowledge of the virus may prove a particularly valuable tool in research on viruses and on heredity because of its simplicity and the minimal amount of nucleic acid that transmits the viral infection. Since it is spherical, BMV is similar in structure to the many larger viruses that cause hundreds of diseases, points out Dr. Kaesberg. And if these spherical viruses have a similar structure, they may follow a similar pattern in attaching to cells and infecting them.

After growing the virus and taking it apart, purifying, weighing, chemically analyzing and photographing it, Prof. Kaesberg and student Bockstahler have found that:

- BMV has a molecular weight of 4½ million, less than half of the small polio virus. Its diameter is only about twice as thick as that of the tail of a typical bacterial virus such as T2. (It would take about 3,000 brome grass mosaic viruses stacked on top of each other to make a pile as thick as a sheet of paper.)
- BMV contains only about half as much hereditary material (RNA) as the polio virus. This RNA is shaped like a long chain that has been balled up and squeezed into the central part of the virus. If the chain were stretched out, it would be about 15,000 angstrom long (1 angstrom = 10^{-8} cm). The core of the virus is only 200 angstrom across; yet, there is plenty of empty space—100 A—in the very center.
- The virus's protein overcoat consists of 100 identical protein molecules fitted together to form a spherical shell. ■

PING PONG ball model of virus coat is built by Dr. Kaesberg and student Bockstahler.



THORACIC

Hospital survey shows pneumothorax may follow certain new types of diagnosis and therapy

"Idiopathic," when applied to pneumothorax following diagnostic and therapeutic procedures, may simply be a polite word for "iatrogenic," suggest two Detroit surgeons.

Furthermore, "this complication is not so rare," say Drs. Robert O. Antoni and Joseph L. Ponka. Their study of all pneumothoraces occurring in the Henry Ford Hospital during a four-year study showed one third were iatrogenically produced. The trouble can be traced, they believe, to introduction of a number of new therapeutic and diagnostic techniques used by surgeons, otolaryngologists, internists, gastroenterologists and anesthesiologists.

Writing in a recent issue of *Surgery, Gynecology and Obstetrics*, they point out that a score of these techniques give air a chance to invade the pleural cavity—by at least three different mechanisms. The first, and perhaps the least dangerous route, is a direct leak in the "closed" system during thoracentesis or drainage of the pleural cavity.

Mishaps in Four Sites

The second and most common mechanism, however, is a simple wound puncture of the parietal pleura that damages the underlying lung. Such mishaps usually occur, they believe, in four sites:

- In the cervical pleura, during stellate block anesthesia, brachial block anesthesia, subclavian angiography, or in surgery of the low neck region.
- In the intercostal space, during surgery of the thoracic wall, intercostal block anesthesia, needle biopsy of the liver or spleen, thoracentesis or cardiac catheterization via the paravertebral route.
- In the costomediastinal recess, during pericardial paracentesis.
- In the right and left costovertebral area, during translumbar aortography approaches to the kidneys or adrenal glands or during drainage of subdiaphragmatic abscesses.

Air trapped in the mediastinum is

MISHAPS MAY BE MD'S MISTAKE

the third major cause of pneumothoraces cited by the Detroit team. Air under tension in this area, they point out, can leak into the lung cavity by rupturing the fragile mediastinal pleura, escaping up into the neck, face, axilla or thoracic wall or following the aorta and esophagus into the retroperitoneal area.

IATROGENIC PNEUMOTHORAX

PROCEDURES	NO.	PNEUMOTHORAX
Thoracentesis	255	11
Tracheotomy	165	6
Brachial block (supraclavicular)	767	5
Arteriogram (subclavicular)	36	5
Liver needle biopsy	319	3
Radical mastectomy	307	3
Intercostal block	74	2
Stellate ganglion block	204	2
Translumbar aortography	1389	2
Bronchoscopy	425	1
Radical neck operation	123	1
Thyroidectomy	703	1
Parathyroid surgery	16	1
Paravertebral cardiac catheterization	287	33

Indirect Result of Surgery

Thus, pneumothorax can indirectly result from any surgical procedure of the neck which involves opening the pretrachial fascia; from the accidental perforation of the trachea during neck surgery, bronchoscopy or endotrachial intubation or from pulmonary interstitial emphysema that occurs when safe intra-alveolar pressures are exceeded by the anesthesiologist.

The diagnosis is missed in many of these cases, claim Drs. Antoni and Ponka, simply "because the physician may not be conscious of the possibility of this complication." The most reliable diagnostic sign in the immediate postoperative period, they say, is subcutaneous emphysema. "It may be the first and only indication that air has accumulated in the mediastinum under tension, and it occurs in more than 50 per cent of the patients," they write.

During surgery, physicians should be wary of signs of asthmatic breathing. If the patient shows signs of labored breathing, especially if movement of the breathing bag is minimal, an air leak should be suspected, they believe. Tachycardia, cardiac arrhythmias and hypotension will follow if intrapleural air continues to build up. If cyanosis occurs, they recommend doing a needle aspiration or closed thoracotomy immediately.

Delay May Be Disastrous

When the physician suspects a pneumothorax, but there are no obvious signs of a developing complication, "it is justifiable to wait for roentgenologic confirmation," they state.

"But such an examination is time-consuming and the delay in therapy may be disastrous," they add.

Therapeutically, they prefer to remove the air by thoracotomy with continuous underwater drainage. Simple aspiration, they find, may be only a staying procedure; the pneumothorax may recur since most of these cases are tension-induced.

Other therapeutic pointers: Remove any respiratory obstruction immediately; give oxygen by positive pressure mask; and give *Demerol,* rather than morphine.

With this prescription, Drs. Antoni and Ponka have made a remarkable record.

Of all the 226 cases of pneumothorax seen at the Henry Ford Hospital between 1955 and 1959, including 76 which were iatrogenically produced, there were no deaths. ■

SPONTANEOUS PNEUMOTHORAX OF 'A MOST UNUSUAL KIND' DESCRIBED

Spontaneous pneumothorax of a most unusual kind has just been reported by a Laurel, Md., physician. His patient suffered numerous episodes at the time of the menstrual period—but had no demonstrable disease in the lung, pleural cavity or diaphragm.

The patient, reports Dr. Robert C. Wingfield, experienced some 40 to 45 bouts of severe chest pain and shortness of breath in the five years following birth of her last child. Each time, pain was fairly strong for about two days, simultaneous with the onset of menstruation. Then it gradually subsided. On occasions she also experienced "a gurgling sensation" in the right chest, belching, and abdominal fullness.

X-rays were taken at the beginning of two menstrual periods, and both times confirmed the finding of spontaneous pneumothorax in the right hemithorax. The patient underwent right thoracotomy, at which time the lung was found to be essentially normal.

The entire lung and the parietal pleura were abraded with gauze, and the patient has remained free of symptoms and signs for more than three years.

According to Dr. Wingfield in the *Maryland State Medical Journal:* "This finding of pneumothorax occurring at the time of menses is indeed strange; no doubt other cases will be reported."

SUGAR WATER 'SUBS' FOR BLOOD

Oklahoma City surgeons use small amount of dextrose and water as replacement therapy in open heart surgery. They find the method makes such operations safer, easier, cheaper

A group of Oklahoma City surgeons is using plain "sugar water" to replace fresh blood in open heart surgery.

By combining several advances in surgery, Drs. Nazih Zuhdi, Allen Greer and John Carey at Mercy Hospital are now doing as many as six to eight open heart procedures a week, using about 800 cc of five per cent dextrose and distilled water (for an average-sized adult) to replace eight to ten units of fresh, heparinized blood.

The group has done 106 operations with this method since February, 1960. At the University of Minnesota, surgeons who have been employing low molecular weight dextran for cardiac surgery (MWN, June 9, "Dextran Simplifies Open Heart Surgery") have repeated Dr. Zuhdi's methods in 16 cases — with "excellent results," according to Dr. Richard A. DeWall, developer of the widely-used DeWall oxygenator.

In Dr. DeWall's opinion, this latest step toward making intracardiac operations easier, safer and less expensive, will extend them to many more hospitals.

Dr. Zudhi, a 36-year-old Lebanese-born surgeon, studied under Drs. DeWall and C. Walton Lillehei at Minnesota during 1956 before going to Oklahoma City. Finding no elaborate blood-collecting organization, he welded three techniques, in collaboration with Drs. Greer and Carey.

First, he modified the DeWall oxygenator by devising a volume-decreasing heat exchanger — a helix of one-half-inch stainless steel running through the helix-shaped reservoir. This inner coil decreases fluid volume some 30 per cent and cools the bloodstream to between 25° and 30° C without cutting the efficiency of the helix as a bubble separator and reservoir.

Almost Any Fluid Would Do

Thus, by moderately cooling patients to reduce metabolism and oxygen needs, the surgeons could safely employ a second step: slowing the pump rate. With pump speed reduced —generally to about 20 cc per kilogram of body weight per minute—still less fluid was needed.

With this method, they operated on a series of 41 patients using small amounts of fresh blood supplemented with routinely collected and processed blood available from the bank.

"We reached a point," Dr. Zuhdi explains, "where we could use almost any fluid—albumin, dextran or dextrose and water—because there was so much less volume."

Originally, he and his colleagues tried the dextrose and water solution in the laboratory and worked out what they call "the principles of hemodilution."

Water and Blood Soon Mix

Then, in February of last year, for the first time the pump was primed with less than a pint of dextrose and water instead of fresh blood. The only blood needed—in this operation on a six-year-old boy—was a small quantity of banked blood to replace the blood lost because of surgery.

"Our big concern before we started was what would happen to the water," Dr. Zuhdi recalls. "Would it stay in circulation during surgery, or would it be absorbed too rapidly.

"We found that it does stay in circulation during the operation and is rapidly absorbed afterward—which is ideal. The patient ends up normovolemic during perfusion, with a decreased red blood cell mass, well tolerated because of the hypothermia."

Dr. DeWall adds: "The water and the patient's blood soon are mixed. The hemodilution may be a real advantage. The less viscous blood flows

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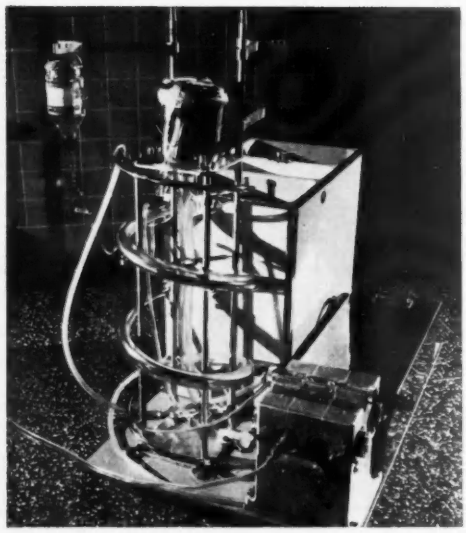
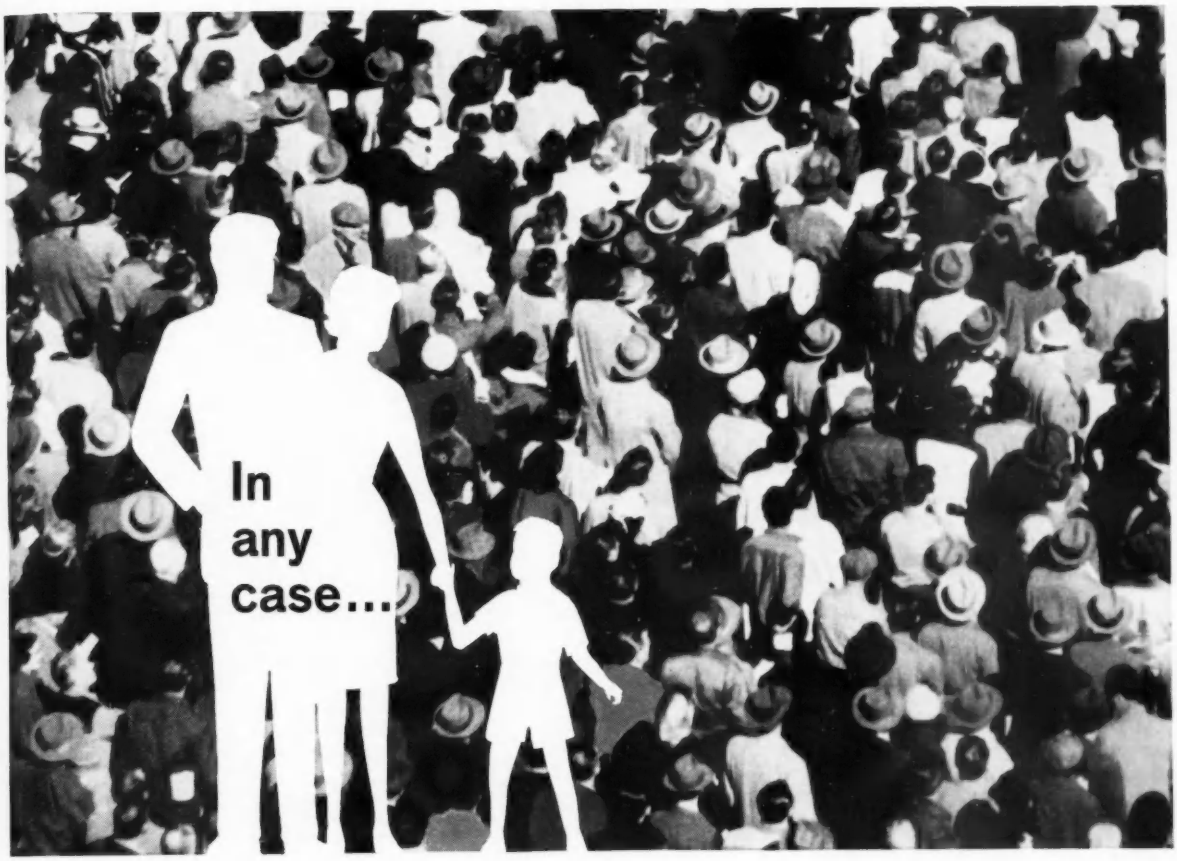
HELIX for pump-oxygenator cools blood and reduces metabolic rates.

OXYGENATOR used at low speed cuts fluid needs.





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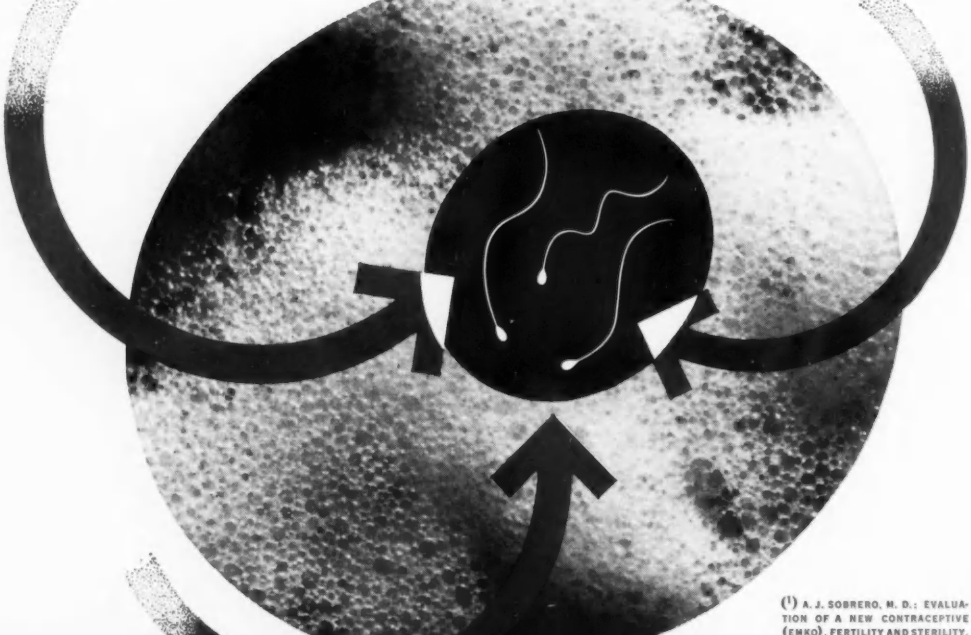

[1] A. J. SOBRERO, M. D.: EVALUATION OF A NEW CONTRACEPTIVE (EMKO). FERTILITY AND STERILITY, 11:5:518-524 (SEPT.-OCT.) 1960.

*PAT. NO. 2,943,979. OTHER PATS. PEND.

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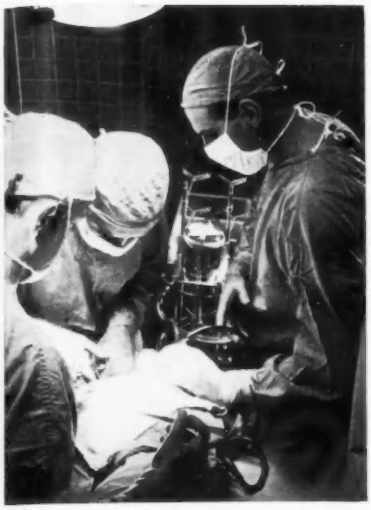

TEAM now uses sugar water routinely.

SUGAR WATER CONTINUED

more readily through the capillaries, resulting in better oxygenation and reduced damage to tissues.

"At the end of the operation, all the mixed blood and water in the machine is pumped back into the patient, restoring red blood cell mass and helping meet his daily fluid requirement. The excess water is rapidly absorbed or eliminated.

"This procedure eliminates the dangers of massive transfusions — bleeding problems, hepatitis, kidney reactions. And it eliminates what is often an added $350 to $500 blood bank charge on the patient's bill."

Dextrose in Water Exclusively

The Mercy Hospital group is now using the dextrose in water exclusively, in repairing all types of defects. Their priming formula is the patient's weight in kilograms multiplied by 16 cc.

"The special preparation and use of large amounts of blood for priming machines of different types are no longer necessary," Dr. Zuhdi says. "We use merely a simple, small-volume oxygenator. Its cost is small, about $200 plus the price of a singleheaded pump. It can be autoclaved, and most of it is disposable."

The Oklahoma surgeons (who credit Dr. Frank Gollan—physiologist now at the VA Hospital, Coral Gables, Fla. — for laboratory work that laid much of the basis for these advances) believe the same methods can be adapted to regional perfusions, and to hypothermia for most major surgery. ■

DIRT-EATING CHILD UNEARTHS NEW DISEASE

Strange symptoms in a Welsh infant reveal the first known human case of cobalt deficiency

What is believed to be the first recorded case of cobalt deficiency in man has been described from Monmouthshire, in Wales.

The patient was a 16-month-old girl, born and bred on a hill farm, who persistently ate earth. The habit started when she was able to crawl. Even indoors, if there was a flower pot within reach she would help herself to the earth in it. The amount swallowed in some cases was sufficient to turn the stools a dark earthy color. The parents' chief concern, however reports Dr. Vernon S. Shuttleworth, of Avergavenny, Monmouthshire, was that the child woke every night and "grizzled" for hours; it was impossible to get her to sleep again. This had happened every single night of the child's life. She was given a variety of drugs over a number of weeks but they were discontinued because she failed to respond and it was feared that the drugs would cause more harm than the sleeplessness.

The child was pale, tired and drab-looking. The only other abnormality was the dry, lackluster appearance of her hair, which was matted and very dull. At this stage it was considered that the earth eating might be an instinctive urge to remedy some deficiency in the diet. Mr. R. S. Cameron, veterinary surgeon, Monmouth, who was consulted, was certain that the child was being fed on milk from cows suffering cobalt deficiency, and therefore it was decided to give cobalt therapy an empirical trial.

The child was given cobaltous chloride, 1 mg daily for 30 days, in a mixture flavored with blackcurrent syrup. This was added to her usual dose of rose hip syrup to increase palatability. After a total dose of 5 to 10 mg, she ceased to eat earth—decisively and permanently, reports Dr. Shuttleworth. On the 28th day she slept from 11 PM to 5 AM, and on the next three nights she slept all night. Subsequently, Dr. Shuttleworth adds, she has only awakened at night if wet or hungry, and has promptly fallen asleep after attention.

For about the next month the child was then given *Plesmet* syrup, a proprietary preparation containing ferrous amino acetosulphate (equivalent to 25 mg of ferrous iron) and 1 mg of aneurine hydrochloric hydrochloride. At the end of the month the change in the child's condition and temperament was obvious. She had stopped grizzling, was obviously feeling well and looked vital and intelligent. Her hair was restored to normal softness, texture and lustre and had turned from ash blonde to golden. A fractional test meal proved that the child had achlorhydria.

In view of the veterinary surgeon's opinion about the cows on the farm, the National Agricultural Advisory Service carried out analyses of soil and pasture for cobalt. Every field on the farm was deficient in cobalt and it would seem a fair assumption that the cattle had been suffering from a degree of cobalt deficiency for some time, consequently producing milk low in cobalt, says Dr. Shuttleworth. ■

LAB FINDINGS IN COBALT DEFICIENCY

	BEFORE COBALT TREATMENT	AFTER COBALT TREATMENT	AFTER IRON TREATMENT
Hemoglobin	65 per cent	62 per cent	75 per cent
Red blood cells	5,120,000 per cu mm	5,000,000	5,050,000
Color index	0.64	0.64	0.75
White blood cells	16,000 per cu mm	12,200	12,600
Packed cell volume	32 per cent	34 per cent	38 per cent
Mean corpuscular hemoglobin concentration	30 per cent	30 per cent	29 per cent
Mean corpuscular volume	63 $c\mu$	68	76

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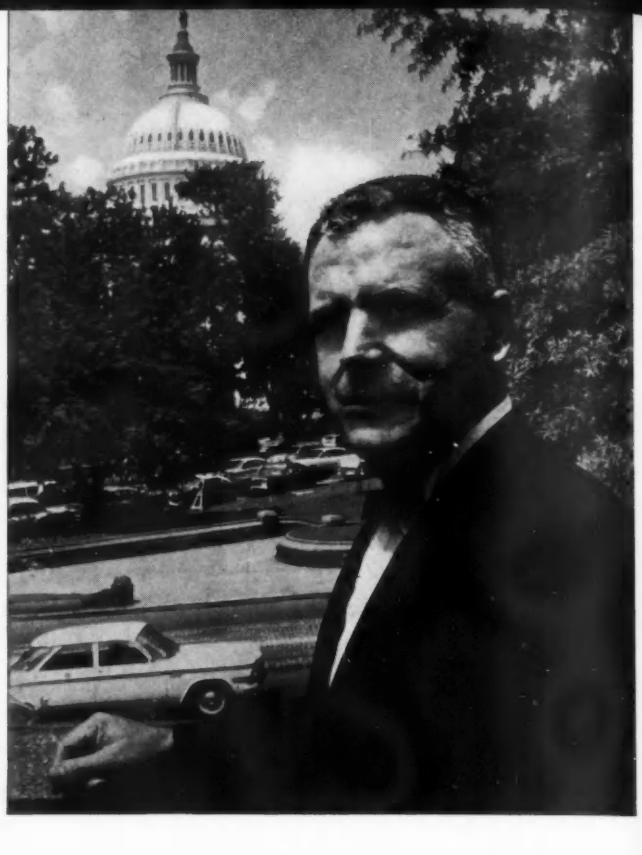
Rep. John E. Fogarty

HEALTH SPOKESMAN IN HOUSE

One-time bricklayer becomes a key force behind the $4 billion Federal medicine and research programs



At an American Cancer Society dinner in New York one night in 1952, Rep. John E. Fogarty of Rhode Island listened raptly as Dr. George N. Papanicolaou talked about cervical cytology. The Democratic Congressman was impressed by the potential benefits for millions of women, and immediately resolved to do what he could to make sure they were realized.

On his return to Washington, Rep. Fogarty began peppering Public Health Service officials with nagging questions about what was needed to get a cervical cytology program going. They came up with answers, and he went into action. The result was a series of Congressional appropriations, the famed Memphis field trial and, in a remarkably short time, nationwide adoption of the technique for cervical cancer screening.

Such is the way Fogarty operates. The veteran Congressman, chairman of the House Subcommittee on Health Appropriations, is constantly prodding medical leaders to say what they need to speed progress in any field, whether it is cystic fibrosis or hearing defects. Then he fights to get it, persuading Congress to put up the money and spurring Government officials into action.

Thus, the one-time labor leader has had an impact on American medicine that few other laymen or even doctors can claim. Fogarty has had a decisive role in the phenomenal postwar expansion of medical research, and in literally dozens of other national programs—from fluoridation and mass x-ray screening for tuberculosis to the current large-scale attack on the causes of birth wastage and mental retardation.

Setting Medical Pace

This week, as Congress grappled with the huge, new HEW budget, Fogarty was helping call the turn on more than $4 billion in appropriations. Together with his Senate counterpart, Sen. Lister Hill (D-Ala.), he was shaping decisions that would set the national pace for medical research and health promotion during the coming year.

Even though the spending figures were not finally established, it was already clear that the pace would be fast. With his subcommittee's support, Fogarty was pressing for action to speed the application of research discoveries by physicians. He was demanding more investigation into environmental health hazards. He was throwing his full weight behind a new program of "super" clinical centers to provide extremely high quality studies. And with Senator Hill the Rhode Island Representative was calling for more funds to step up medical research efforts across the country.

The 48-year-old Fogarty, onetime president of Bricklayers Local 1 in Providence, is a shrewd but blunt-talking liberal, proud of his support from organized labor and a strong believer in Government action to help solve many of the nation's economic and social problems.

Thus, he champions large-scale Federal aid for medical research and disease control. He is demanding action on a broad front—not just medical—to meet the complex needs of the aged. He is sponsoring legislation to bolster medical education through construction grants, direct aid to medical schools, and scholarships and loans for medical students. And he feels, in general, that medical services must be expanded, streamlined and, if necessary, reorganized to meet the changing needs of our dynamic modern society.

In the case of his medical education bills, he doesn't mind saying he could use a little help from organized medi-

cine. "We could get quicker action in Congress if the AMA would support us. Their opposition to this urgently needed legislation is, in my opinion, outdated leadership."

At the same time, he has ripped into the Administration for failure to develop a comprehensive program for meeting the economic and social, as well as medical needs, of the aged, and to follow up the White House Conference on Aging which he had sponsored. In his subcommittee report on the HEW budget, he charged that "there is no clearly defined [HEW] program and little evidence of leadership directed toward positive action." Without a clear blueprint, he argues, the White House Conference will have been "one of the most expensive, least productive, and cruelest hoaxes ever perpetrated against the aged."

Fogarty also strongly believes that Federal and local governments, as well as ordinary citizens, should have just as much a voice in deciding medical and health issues as doctors.

Voice of Decision

"A lot of people still seem to think that if they have a good doctor, they can relax and rely entirely on him to look after their health. Maybe some of their doctors have been a little too inclined to encourage that idea; maybe some of them even believe it themselves. But I say that's a 19th century idea."

Little in Fogarty's early life gave any hint that he would one day become an influential member of Congress and a powerful force in American medicine. His father was a bricklayer and his mother worked in a textile mill until she had to devote all her time to raising five boys and a girl. The family lived on a farm in the little town of Harmony, just outside Providence. After graduating from high school in 1930, Fogarty began laying bricks for a living.

But politics quickly beckoned. While still in his teens, he organized a young men's Democratic club in Harmony. At 21, he was named chairman of the town's Democratic Committee, and at 24 he was elected president of the bricklayer's local. Along the way, he sharpened his speaking talents with courses at Providence College which, 12 years later, awarded him an honorary doctorate of political science.

In 1938, he missed the Democratic nomination to Congress but won two years later, riding into Washington along with the Roosevelt landslide of 1940. In the House he was staunchly pro-Roosevelt and pro-labor, but at first he was not concerned with health legislation. However, in 1947, he was assigned to the Health Appropriations Subcommittee which sparked an interest and enthusiasm that have never flagged.

Intimate Knowledge

Fogarty has developed an extraordinarily intimate knowledge of a broad range of complex medical problems. If he is not on the best terms with the leaders of organized medicine, he *is* the respected and influential friend of most of the top medical research leaders in the country. (Dr. Paul Dudley White personally attended him after a 1953 heart attack.) And his decisions carry great weight throughout the research community, within the Government and, most of all, in Congress.

Every year, he presides over the hearings on money to be spent by HEW, the Public Health Service, NIH and related agencies. Invariably, the Administration has failed to recommend as much as Fogarty and outside health leaders think the problems demand. And, invariably, he has prodded Government witnesses into admitting they could use more.

A typical exchange occured this year between Fogarty and Dr. Robert H. Felix, director of the National Institute of Mental Health, who tried to avoid appearing disloyal to the Administration and its budget.

Prodding Testimony

Rep. Fogarty: Doctor, in your professional judgment how much do you think ought to be appropriated [for the Mental Health Institute] for 1962?

Dr. Felix: Well, Mr. Chairman, the budget before you allows for increases . . . .

Rep. Fogarty: Tell us now what in your professional judgment you think ought to be appropriated for 1962.

Dr. Felix: We could perhaps use some increases in some areas. I haven't given a great deal of thought to this.

Rep. Fogarty: Didn't you think I was going to ask you?

Dr. Felix: Well, I am up here to support the budget I have before me. It is a forward-looking budget.

Rep. Fogarty: That is what you are supposed to do until I ask this kind of question. Then you are supposed to give us your best professional judgment as to the answer.

Dr. Felix: I believe we could use additional funds in a number of the items . . . somewhere between $117 and $120 million as a total figure. . . . [$31.7 million more than the Administration recommended.]

Fogarty pried similar testimony out of the other Institute directors and collected a mass of supporting counsel from such research leaders as Drs. Huston H. Merritt and Howard A. Rusk, Isador S. Ravdin and Michael DeBakey, Sidney Farber and Nathan Kline. With this evidence, he had no trouble convincing the House to approve a $58 million boost for NIH and a $73 million hike for PHS as a whole.

In his 14 years as a member, and now chairman of the Health Appropriations Subcommittee, funds for the National Institutes of Health and its research grant programs have soared from a mere $3.5 million in 1947 to more than $600 million in 1961. The Federal Government now supports more than half of all the medical research in the country.

More Than Appropriations

But it isn't only appropriation increases that symbolize Fogarty's influence. Once, for example, after making a speech, he was asked what the Government was doing about mental retardation. He confessed he didn't know, but promised to find out. Discovering that very little was being done, he prodded Congress to appropriate $750,000 to look into the situation. Today the Government is spending more than $20 million a year on research projects and collaborative programs aimed at conquering mental retardation.

In his early days on the subcommittee, Fogarty also had a hand in sparking the mass chest x-ray program for TB case finding, in spurring the early widespread availability of streptomycin and in launching fluoridation

CONTINUED ON PAGE 28

FOGARTY CONTINUED

programs across the country. After he became chairman in 1951, he exercised even stronger leadership, playing a major role in promoting the large-scale increase in research on cancer and heart disease, in financing the research into the thorny problem of retrolental fibroplasia, and in launching dozens of other programs such as psychiatric education of general practitioners.

Fogarty has also had a good deal to do with building the organizational landmarks that have made the phenomenal post war expansion of medical research possible. These include the now large-scale science training grant programs, the research and facilities construction act and the new experiment in awarding universities institutional research funds rather than limiting grants to individual scientists.

Currently, he is pressing NIH and other groups to crack the bottleneck in medical communications so that new research findings are more quickly applied. Thus, in his committee report, he charges that "the lapse of time between the development of clinically useful research results and their application to diagnosis and treatment by physicians throughout the country is often much too long." He is insisting that NIH act more vigorously to explore ways of speeding communications. He has even advocated advertising techniques as one possibility.

"There are some doctors who pick up research findings quicker than others," he says. "We are trying to find ways to see that all physicians apply them for the benefit of the people, as soon as they are available. We've got to get this research applied, even if we have to sell it to the doctors, so that it isn't largely wasted."

In championing more millions for medical research and health promotion, Fogarty has always had to contend with two formidable challengers; the most dedicated and powerful economizers in Congress, Reps. Clarence Cannon (D-Mo.), and John Taber (R-N.Y.). Cannon is chairman of the full Appropriations Committee and Taber is the ranking Republican member.

An Undisputed Reputation

These two men, resisting massive Federal spending even for medical research, have tried to curb their younger subcommittee chairman from time to time. But Fogarty, warning the full House that no American life should be lost because of a lack of medical research funds, usually carries the point. His most memorable victory came just a few years ago when a Republican-Southern Democratic coalition made an all-out effort to drive through major cuts in his recommendations.

During eight days of debate on the House floor, the coalition rammed through cuts in several sections of the appropriation bill. On the ninth day, however, Fogarty staged a counter-attack. He demanded a record number of 14 roll-call votes, forcing the House members to publicly go on record on each medical research appropriation. The result: nearly all of the cuts the coalition had made were restored.

Today, Fogarty's spending recommendations are rarely threatened, for in the House, this skillful and shrewd legislator has an undisputed reputation as champion of medical research and progress. ■

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SUPPLIED: HUMATIN (paromomycin, Parke-Davis) is available as the sulfate in Kapseals,® each containing the equivalent of 250 mg. of base, in bottles of 16.

REFERENCES: (1) Coffey, G. L., *et al.: Antibiotics & Chemother.* 9:730, 1959. (2) Courtney, K. O.; Thompson, P. E.; Hodgkinson, R., & Fitzsimmons, J. R.: *Antibiotics Annual* 7:304, 1959-1960. (3) Godenne, G. D.: *ibid.*, 310. (4) McMath, W. F. T., & Hussain, K. K.: *Pub. Health* 73:328, 1959. (5) Personal Communications to Department of Clinical Investigation, Parke, Davis & Company, 1959. (6) Shafei, A. Z.: *Antibiotic Med. & Clin. Therapy* 6:275, 1959. (7) Lopez Elias, F., & Oliver-Gonzalez, J.: *Antibiotic Med. & Clin. Therapy* 6:584, 1959. (8) Carter, C. H.: *Antibiotic Med. & Clin. Therapy* 6:586, 1959. (9) Thompson, P. E., *et al.: Antibiotics & Chemother.* 9:618, 1959. (10) Dooner, H. P.: *Antibiotic Med. & Clin. Therapy* 7:486, 1960. (11) Coles, H. M. T., *et al.: Lancet* 1:944, 1960. (12) Moffett, H. F., & Toh, S. H.: *Antibiotic Med. & Clin. Therapy* 7:569, 1960. (13) Fast, B. B.; Wolfe, S. J.; Stormont, J. M., & Davidson, C. S.: *Arch. Int. Med.* 101:467, 1958. (14) Mackie, J. E.; Stormont, J. M.; Hollister, R. M., & Davidson, C. S.: *New England J. Med.* 259:1151, 1958. (15) Stormont, J. M.; Mackie, J. E., & Davidson, C. S.: *New England J. Med.* 259:1145, 1958.

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TWO-FRONT ADVANCE IN ANESTHESIA

Electrical technique has now been used in 14 operations with no brain damage; fast-acting, intravenous drug from France puts patient out in 15 seconds, with recovery in minutes

Since the first trial of electrical anesthesia earlier this year, 14 patients have undergone major surgery under electrical anesthesia at the University of Mississippi Medical Center in Jackson. One of them was anesthetized for as long as two hours and 32 minutes, for a cholecystojejunostomy.

Thus far, the Mississippi team points out, no brain damage has been detected in any of the 14, nor in the three healthy men who originally volunteered for the experiment.

Patients, however, do not all react in the same manner, adds Dr. Don Turner, physiologist and professor of biochemistry at the University. Some remember what goes on, but feel no pain; in others, analgesia is accompanied by amnesia—both limited to the duration of electric current; and in some, analgesia was not complete.

No basic changes have been made since the method was initiated six months ago (MWN, Feb. 17). The simple electrical equipment has been modified only to increase safety and ease of operation. Two electrodes are used, one on each temple. The current (700 cycles, 50 milliamperes, 22 to 30 volts) is started just before surgery.

Additional Cases Needed

Many more cases must be studied and followed up for a longer time before the method can become of general clinical use, says Dr. Turner. But if the preliminary findings of no brain damage are confirmed, the simplicity of electrical anesthesia and its lack of side effects are likely to be particularly useful to patients who are too sick to withstand standard anesthetic methods, he says. The U.S. Army, which supports the research project, is also considering its potential value as a fast anesthetic for battlefield surgery.

Another new and fast-acting anesthetic described at the recent AMA meeting is a synthetic amide given in a single intravenous injection, usually in the arm. Called G-29505, its greatest usefulness, developers say, may be in young children.

G-29505, developed by French chemist M. J. Thuillier, is being used at the University of Michigan and Duke University Medical Centers. One of its advantages is that duration of anesthesia can be controlled by the amount of G-29505 injected, according to Dr. Guenter Corssen, assistant professor of anesthesiology at Michigan. The patient is "out" 15 seconds after the injection, and recovery is prompt, with no side effects. The drug acts so rapidly, he notes, that often a patient doesn't realize he has been anesthetized. One, he recalls, "went out" in the middle of a sentence and completed the sentence when he snapped awake after the operation. This quick recovery is credited to the rapid breakdown of the drug in the blood, into a

BRITISH PRIDE SWELLS OVER LATEST ORA

Great expectations are claimed for new synthetic penicillin but U.S. scientists say it's too soon to cry 'breakthrough'

Penicillin may have originated in Britain but, as the *British Medical Journal* notes unhappily, important work in the field has been "for too long in other hands."

In fact, Britons and others have waited in vain for the variety of useful synthetic penicillins expected to follow the discovery — at Beecham Research Laboratories two years ago —of a process for manufacturing the penicillin nucleus. Recently, *The Lancet* thought a good one had been found—PA-248. The British journal said, "it will probably prove the most generally useful oral penicillin in clinical practice." Further experience, however, showed that PA-248 was less useful than its advance notices indicated.

Now an editorial in the *British Medical Journal* enthusiastically notes the discovery by Beecham labs of another new synthetic which, "for some purposes at least" should make the earlier broad-spectrum antibiotics "out of date."

Noting that the goal of penicillin synthesis is to overcome the deficits of penicillin (low activity against most gram-negative bacteria, susceptibility to destruction by staphylococcal penicillinase, and acid lability), the *BMJ* says "all these aims have now been achieved, though not in a single penicillin but in three different ones." The first two, also discovered at Beecham, were phenethicillin and methicillin. The new one is alpha-amino-benzyl penicillin, or (patriotically) *Penbritin*.

Penbritin is most noted for its action against several species of gram-negative bacteria, including Salmonella, Shigella, E. coli and some species of Proteus. The drug has an activity somewhat inferior and in a few instances equal to that of penicillin G against sensitive staphylococci, hemolytic streptococci and pneumococci, but it is attacked by penicillinase of resistant staph. It is also bactericidal, rather than bacteriostatic, as many antibiotics are, and is acid stable, thus allowing oral administration, according to *BMJ*.

'No More Than a Beginning'

It was tested for oral administration [in dogs] and found to produce higher and better blood levels than similar doses of phenethicillin or penicillin V. And the first clinical trials on eight children have shown that it can be successful in the treatment of urinary-tract infections caused by sensitive coliforms and streptococci. Two children with peritonitis also appear to have responded well. But attempts to eradicate pathogenic organisms from the bowel in one acute infection and nine carriers failed in eight—presumably because the drug is well absorbed and therefore cannot be expected to reach the lower bowel in

water soluble salt which has no anesthetic properties.

An initial five to seven mg/kg dose is used, resulting in six to eight minutes of anesthesia, says Dr. Corssen. If the operation lasts longer than expected, small increments can be added.

A slight hemolytic reaction has been observed in a few patients who received large doses, but in all cases, hemolysis cleared up within a few hours. Several women in the menopausal stage have broken out in a temporary rash when given G-29505. The anesthetic may also temporarily increase blood pressure, and therefore is not recommended for use on hypertensive patients.

Dr. James Hayward, chief of oral surgery at the University of Michigan Medical Center, has used the new anesthetic on over 60 patients, and highly recommends it for operations in the mouth, where other methods may obstruct the surgeon's field. G-29505 was used on one infant two months old, and on 20 others younger than six months. "In young children," points out Dr. Corssen, "it works beautifully, and its effects are very predictable." ■

ANTIBIOTIC

any substantial concentration. The only toxic effects reported were rashes, observed in three cases. However, in one case it was shown that a sensitivity reaction to penicillin G is associated also with a sensitivity reaction to *Penbritin*.

In spite of *BMJ*'s own suggestion that these reports are "no more than a beginning" (only a dozen patients have been treated with *Penbritin* so far), the journal enthusiastically proclaims that "this important discovery fully and finally justifies the hopes which were entertained two years ago, and it should be a matter for great satisfaction that it has been made in Britain."

But researchers in the U. S. are more cautious. At Bristol Laboratories, where investigation of the new penicillin is "in advanced stages" and clinical trials are underway, chemists caution that "the drug may be promising, but it is much too early to say whether the word 'breakthrough' should be used." ■

TYPICAL TRANSIENT'S health problems are aggravated by low pay, crowded living conditions, and lack of proper sanitation.

MEDICINE COMES TO THE MIGRANT

Proposed new Federal funds may help to ease the health problems of itinerant workers

Every autumn and spring, migrant farm workers and their families flock to the highways and follow the harvest. Wanted only as cheap labor, they tour America's rural slums, bringing health problems with them.

More than one million such nomads — white, Negro and Spanish-speaking — settle into barracks and one-room hovels at farm camps. Many lack drinking water and toilets. Malnutrition, tuberculosis and syphilis are common.

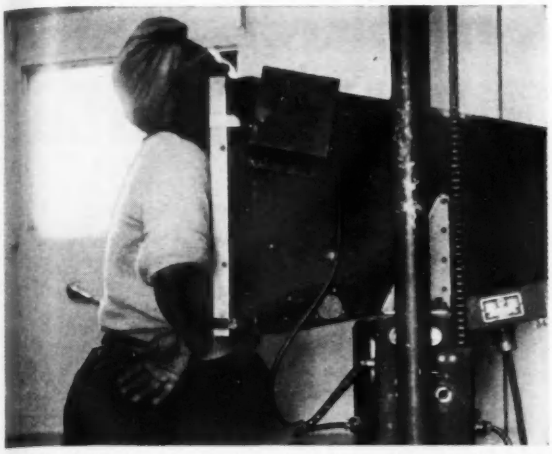
Last week the Senate Labor Committee approved five Administration-backed bills to alleviate what has been called "the ugliest kind of human waste." One proposal offers $3,000,000 in matching grants to states for improving the migrant's medical lot.

Private physicians, in addition to the U.S. Public Health Service and state health departments, have long been trying to do what they can. In Sussex County, Del., a typical area, Dr. Evelyn Orton gives check-ups and immunization shots to the children in a large camp at Staytonville, once used for prisoners of war. With showers and outdoor water taps, "it is one of the better camps," says Dr. Floyd I. Hudson, Delaware Board of Health.

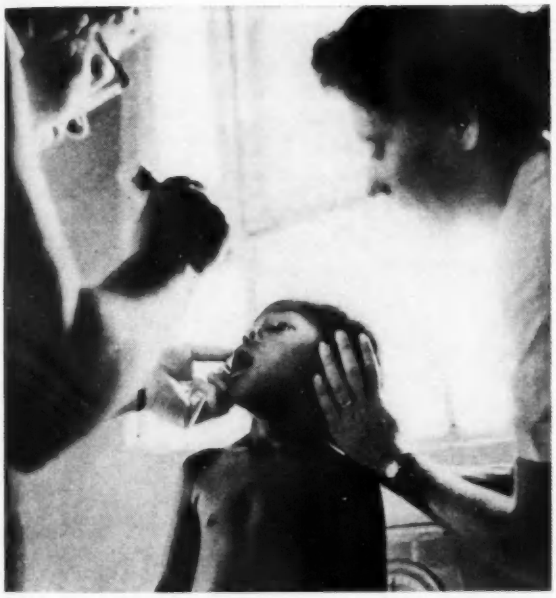
Since the pickers earn only about $1,000 a year, the major burden of preventing and treating disease is left to the communities where they work. The State Board of Health, the Delaware Anti-Tuberculosis Society and the USPHS have organized a co-operative health program, including mobile units which test for TB and venereal disease.

True to tradition, GPs bear much of the cost as a matter of conscience. Dr. Rhoslyn Bishoff of Dover, Del., loses $500 annually. But this is only one-fourth the amount uncollected by Dr. Edward Dennis, a Negro GP, who comments: "You can't stand back and say, 'Can you pay me?' You try to get these people reasonably well." ■

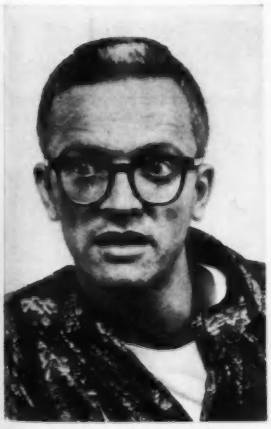
CUCUMBER CREW'S lot is already improved by special community health program.

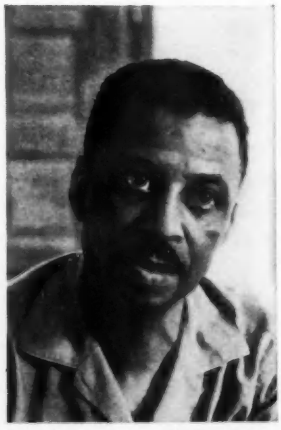


X-RAY EXAM for TB is given free by mobile health unit.



MIGRANT CHILD gets checkup from Dr. Orton of Delaware.





GPs Bishoff (l). and Dennis often "absorb" patients' fees.

VD TESTS are another service provided by local physicians.

LIVING quarters for the whole family consist of one room.

NOW: FOR BETTER MANAGEMENT OF GASTROINTESTINAL DISORDERS

NEW

LIBRIUM PLUS NEW QUARZAN

LIBRAX

CAUSE ⇌ EFFECT THERAPY IN GASTROINTESTINAL DISORDERS

COMBINING TWO EXCLUSIVE DEVELOPMENTS OF ROCHE RESEARCH:

LIBRIUM the successor to the tranquilizers

- helps control the anxiety and tension so frequently associated with gastrointestinal disorders
- may be used with confidence: does not cause diarrhea or other undesirable effects in the digestive tract

QUARZAN a superior new anticholinergic agent

- offers effective antispasmodic-anticholinergic action
- produces fewer, less pronounced side reactions than other anticholinergic agents

---

In peptic ulcer and other disturbances of the digestive tract, effect and cause often become indistinguishable. Emotional tension will precipitate organic symptoms, while organic symptomatology aggravates anxiety and tension. New Librax now enables the physician to disrupt this vicious circle. Many patients can be satisfactorily maintained on Librax alone. At the same time, dietary control and other medications may and should be continued, if indicated.

Clinical trials have established the value of Librax specifically in the following conditions:

- Peptic ulcer
- Hyperchlorhydria
- Gastritis
- Cardiospasm
- Pylorospasm
- Duodenitis
- Biliary dyskinesia
- Ulcerative or spastic colitis
- Irritable or spastic colon
- Other functional or organic disorders of the digestive tract

Consult literature and dosage information, available on request, before prescribing.

LIBRAX™. LIBRIUM® — 7-chloro-2-methylamino-5-phenyl-3H-1,4-benzodiazepine 4-oxide
QUARZAN® — 1-methyl-3-benziloyloxyquinuclidinium

ROCHE LABORATORIES
DIVISION OF HOFFMANN-LA ROCHE INC.

AGED CARE HEARINGS — ROUND ONE

HEW Secretary Ribicoff tells House Committee that King bill cost will be greater than expected, and AMA's President Larson replies that even the new estimate is 'disastrously low'

The Kennedy Administration formally launched its Congressional drive for Social Security health care by making a significant admission—it had miscalculated the probable cost. Health Secretary Abraham Ribicoff told the House Ways and Means Committee that the proposed tax increase would have to be greater than originally estimated.

The new cost estimates—a storm center in the aged care dispute—proved the major surprise as the House finally opened its long-awaited hearings on the King bill. No one had expected the Administration to revise its figures upward at a time when it was attempting to make the best possible case for its program. For, among other things, it enabled the AMA to pounce on the concession as proof of its long-standing claim that the Administration had been grossly underestimating the cost of the King bill. And even the new figures, the AMA added, were probably "disastrously too low."

Ribicoff Leads Off

Secretary Ribicoff, Administration spokesman and lead-off witness at the Ways and Means Committee hearings, reported that the price tag on the Administration proposal would be ten per cent higher than first advertised. He estimated that in full operation (1964) the program would cost over $1 billion a year. As a result, he asked that the income ceiling on which Social Security taxes are collected be boosted from the $5,000 maximum originally recommended by the Administration last February to a new high of $5,200. (The present maximum is $4,800.) Secretary Ribicoff said the cost estimates had to be scaled upward mainly because of changes in the predicted charges for nursing home care and home health services. He reported that the higher tax base would put the proposed program on a sounder financial foundation.

AMA President Leonard W. Larson took the witness stand and lashed out at the cost estimates. He said that the actual price of the Administration's aged health care plan would be anywhere from $2.8 billion to more than $4 billion a year. To show how "confusing" HEW had been, he said, the Department originally pegged the first-year cost of nursing home services at $9 million. Then in May officials hiked their estimate to "somewhere between $25 million and $255 million." Finally, he said, Ribicoff settled on the $25 million.

"I contend, gentlemen, that estimates for public programs, particularly those of HEW, run almost consistently too low. They are pitifully too low for the most part: disastrously too low sometimes. H.R. 4222 (King bill) estimates could easily fall into the disastrous category."

If the King bill is passed, "HEW will be back on your doorstep asking for more money or to curtail benefits," he warned Committee members.

In the two weeks of hearings, proponents and opponents of the legislation clashed repeatedly—and heatedly—on dozens of issues from cost estimates to alleged threats to American medicine. The Administration, the AFL-CIO, the American Nurses Association and other groups, lined up in favor of the King bill. The AMA, numerous state societies, the American Hospital Association and specialty groups took up the position against it.

Ribicoff started off by attacking the AMA's position. He charged that its claim that the King bill would lead to socialized medicine is "a bogeyman with which the AMA seeks to scare the American people." He accused the AMA of "misrepresenting" the Administration's program, and of "misleading" its own members.

Specifically, he accused the organization of having "played loose with the facts" by claiming that 46 states were acting to put the Kerr-Mills program for the needy aged into effect. Actually, Ribicoff charged, the figure should have been 23 states. (In his testimony, Dr. Larson said 27 states had enacted programs and six others had proposals in their legislatures).

Warming to his subject, the Secretary suggested that the Kerr-Mills plan gave states a "blank check" because of its open-end Federal grant features. This, he insisted, was "a mechanism that could ruin this country because it could cost more than $1 billion a year with the Government having to foot half the bill out of general revenues. Later, however, he tempered his criticism, calling Kerr-Mills a valuable instrument for the indigent aged.

Representatives Bruce Alger (R-Tex.), and Thomas Curtis (R-Mo.) clashed with the Secretary. Rep. Curtis, for instance, accused him of misrepresenting the AMA's position and insisted that no American, old or young, was being denied needed medical care.

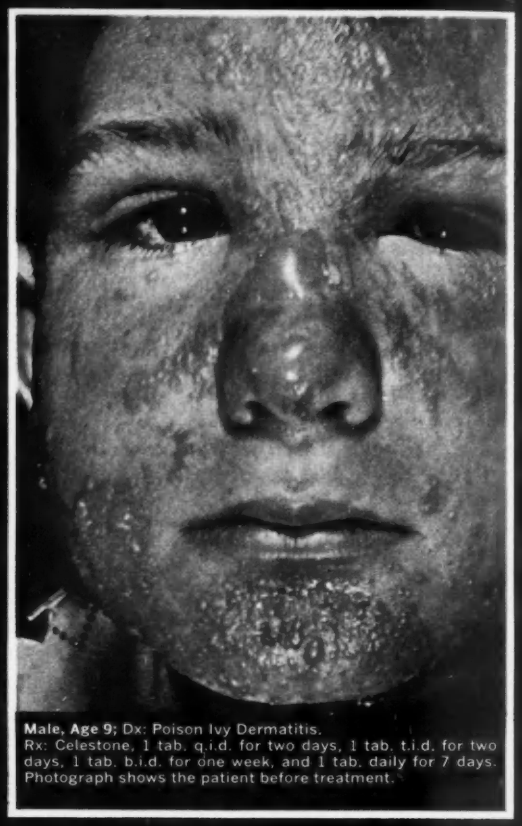
RIBICOFF attacks King bill opponents.

As expected, AFL-CIO president George Meany supported the Administration bill. So did the American Nurses Association, spicing its testimony with charges of intimidation by the AMA because of its stand. Then, midway in the second week of the hearings, the AMA formally presented its rebuttal.

Dr. Larson's prepared testimony ran 91 pages and thousands of words—attacking the King bill on 12 separate counts.

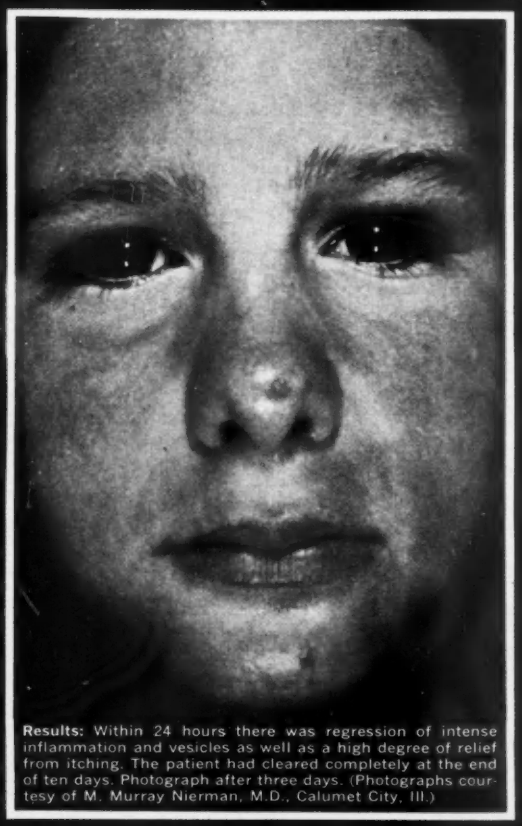
He challenged Congress to show that any aged are deprived of needed care because of cost. He charged that the bill would make the HEW Secre-

CONTINUED ON PAGE 38



Male, Age 9; Dx: Poison Ivy Dermatitis.
Rx: Celestone, 1 tab. q.i.d. for two days, 1 tab. t.i.d. for two days, 1 tab. b.i.d. for one week, and 1 tab. daily for 7 days. Photograph shows the patient before treatment.

Allergic/inflammatory flare-up!



Results: Within 24 hours there was regression of intense inflammation and vesicles as well as a high degree of relief from itching. The patient had cleared completely at the end of ten days. Photograph after three days. (Photographs courtesy of M. Murray Nierman, M.D., Calumet City, Ill.)

Schering

A new achievement in corticosteroid activity: CELESTONE (betamethasone) has been called "perhaps the most important step ahead since the discovery of prednisone and prednisolone..."[1] and "unquestionably the most active adrenocortical steroid we have studied to date."[2] Pre-introductory clinical studies have established not only the high antiallergic/anti-inflammatory activity of CELESTONE but also its "low incidence of side effects... [and] absence of new toxic effects...."[3]

Three significant clinical advantages: In reporting results of a study of 154 dermatologic patients, treated up to 9 months, the investigators[1] cite as "three important clinical advantages of betamethasone [CELESTONE]: its almost uniform effectiveness at exceptionally low dosages, the striking absence of hormonal side effects in our series, and the ability of this corticosteroid to elicit a good therapeutic response in patients who had previously done poorly on other steroids."

Rapid remission with new Celestone

the first major advance in corticosteroid therapy in over 2½ years

Greater utility–ease of use: Gratifying results have been achieved with CELESTONE in a broad range of steroid-responsive disorders, from bronchial asthma and pollenosis to allergic dermatoses, inflammatory ocular diseases and rheumatoid arthritis. Rapid subsidence of allergic or inflammatory flare-up can usually be expected on average daily dosages of from 2 to 8 tablets. The single tablet strength (0.6 mg.) simplifies dosage schedules and facilitates proper dosage adjustment when patients are switched from other corticosteroids. H-390

Safety-speed factor: Results with CELESTONE in 353 dermatologic patients[2] indicate that "its high degree of effectiveness and virtual absence of side effects in low dosages, which permit a simplified therapeutic regimen, make betamethasone [CELESTONE] an exceptionally useful corticosteroid in acute, short-term conditions."

For complete details, consult latest Schering literature available from your Schering Representative or the Medical Services Department, Schering Corporation, Bloomfield, New Jersey.

Bibliography: 1. Gant, J.Q., and Gould, A.H.: Betamethasone: A Clinical Study. Paper presented at First Conference on the Clinical Application of Betamethasone – A New Corticosteroid, New York City, May 8, 1961. 2. Nierman, M.M.: The Use of Betamethasone in Dermatology. *Ibid.* 3. Frank, L.: The Place of Betamethasone in Dermatologic Practice. *Ibid.*

NEW CELESTONE™

(betamethasone) **Tablets, 0.6 mg.**

tary a "czar of hospital care." He insisted that the aged's problem is more psychological than financial and cited steps being taken by organized medicine and by voluntary health plans to meet the problem.

"The staggering costs of such plans, the administrative problems they create, let these considerations be secondary. The important thing is to see, at close range, the disruption of the doctor-patient relationship; the delays in admission to hospitals; the time wasted in the overcrowded offices of doctors; the regimentation of medical practice; the effect of the program on medical research; the availability of medical facilities and personnel—in other words, medicine in action on a Government-run, assembly-line basis."

Dr. Larson charged that more than 50,000 doctors would be "directly affected" by Government regulations and controls under the program. These controls, he said, could lower the quality of medical care. At the same time, he said, the working man would be compelled to finance medical care for millions of aged who are financially able to pay for their own care.

The AMA president accused the supporters of the Administration bill of building on five false premises: 1) that the sociological problem of the aged can be solved through legislation; 2) that most aged are in poor health; 3) that most are verging on bankruptcy; 4) that the problem of financing aged care will get worse before it gets better, and 5) that voluntary health insurance plans, private effort, and existing laws cannot solve what problem there is.

Dr. Larson noted that the backers of the Murray-Wagner-Dingel national health insurance program claimed "private health insurance could never do the job for the population as a whole." Some of these, he said, now contend "voluntary health insurance will never do the job for the elderly."

"We can only hope," he concluded, "that the aged will continue to resist the blandishments of those who offer to trade them promises for ballots and who seek to use the loneliness, idleness and apartness, which many of the aged have been made to feel, as cohesive elements in the formation of a political weapon." ■

Scissors & Scalpel

COLD ITCH IS HOT SCRATCH

In Texas "winter itch" is becoming a summer problem, and it's all because of air conditioning. So maintains a Houston dermatologist, Dr. Marvin E. Chernosky. For the past three summers Dr. Chernosky has been seeing more than the usual number of cases of brittle, chapped or split skin. The cause:

Patients get the winter itch by running from one air-conditioned place to another; they avoid outdoor sports and activities; they work in air-conditioned buildings; they have air-conditioned cars; and they take hotter baths, stay in the water longer and use more soap than they would if they had no air-conditioners.

A GRAND RIGHT AND LEFT

One morning a few weeks ago in Hartford, Conn., a railroad crossing attendant woke up and found both his artificial legs were missing. But he was out more than just a limb or two. He had kept his $17,800 life savings stuffed in the legs: $10,000 in the right and $7,800 in the left, in $100 and $50 bills.

WILD LIFE REPORT

As any doctor knows, regardless of their aural health, people often only hear half of what the MD says.

One example, with a biological twist, came out of recent Federal Communications Commission hearings about complaints concerning radio station announcements which are "alleged to have incited fear in the listeners."

It ran as follows: "We understand from an unconcerned source that there is an amoeba loose in the San Francisco Bay area."

FROM OUT OF THE MOUTHS

The new oral contraceptives are not, we are assured, likely to have an effect on the morals of the younger generation, according to an article in *Mademoiselle*.

"There will be no Roman orgies even when oral contraceptives are sold over a drug counter," writes a college student in the magazine. Preconditioning by society, she emphasizes, would induce most girls to continue regarding sexual relations as wrong. "Although the increased security offered by the pill may make girls somewhat less fearful of sexual involvement, it will not change their monogamous attitude toward sex."

IN VINO VERITAS

New York City physicians have formed a wine appreciation society. Beginning this fall, they will meet regularly for a series of educational lectures and tastings.

President of the society is Dr. Herbert Gould of the Manhattan Eye, Ear and Throat Hospital who says that the society was formed because many doctors are genuinely interested in further knowledge about the uses of wines.

One such use—replacement therapy for iron deficiency anemia was suggested from the other side of the country by Dr. Maynard A. Amerine who describes himself as chairman of the department of viticulture and enology at the University of California,

He notes that most wines contain all 13 mineral elements considered essential to human life and that "about four-fifths of the iron content of these wines is in what is known as the reduced ferrous form"—in other words readily absorbable by the body.

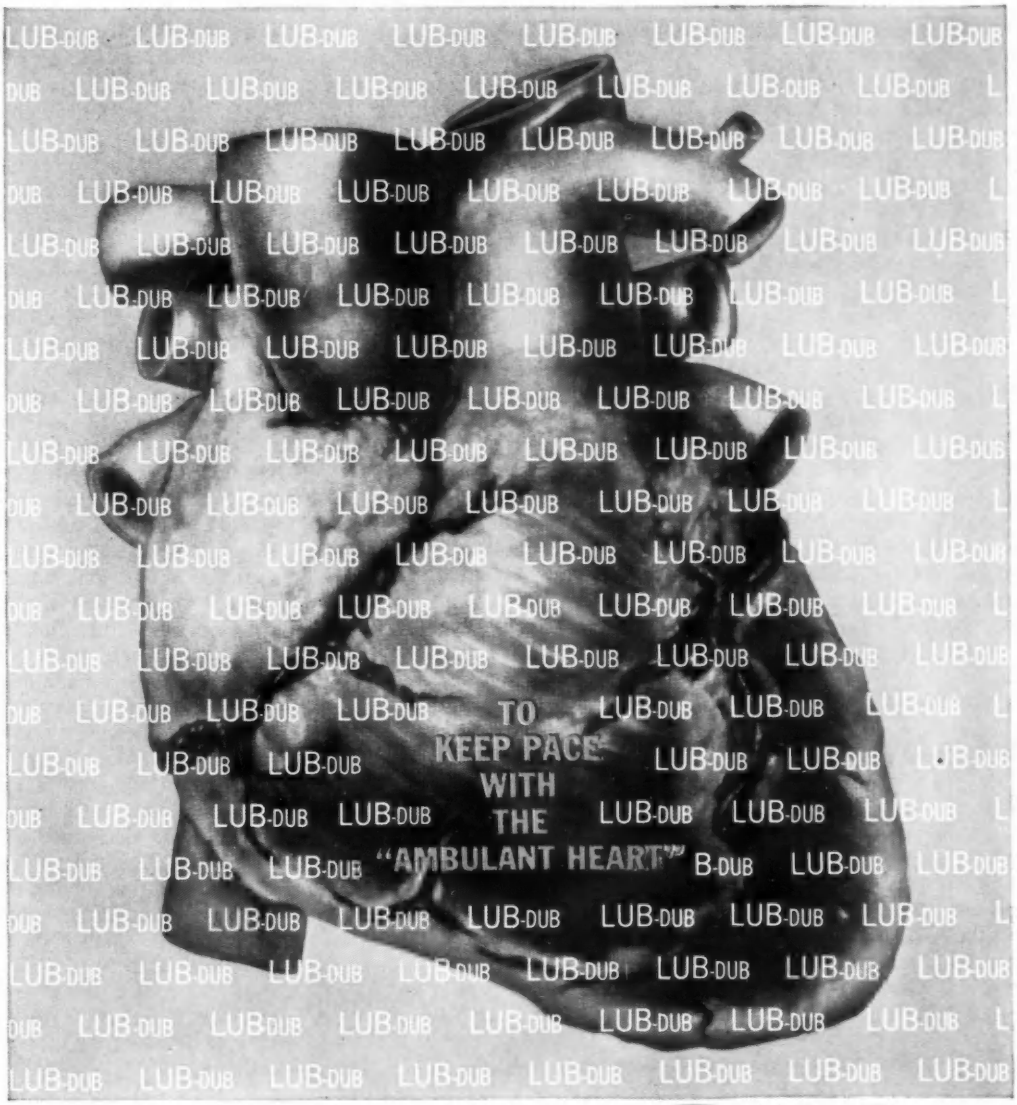
ON A WING AND A PRAYER

Dr. Walter Bruckner swears that this is what happened when he was on duty at Paterson General Hospital, New Jersey. A pigeon, dragging its wing, made its way into the emergency ward, and waddled as best it could over to Dr. Bruckner—who picked up the weary bird and examined its limp wing. An x-ray revealed a piece of BB shot, which was removed. Once the bandage was on the wing, the pigeon waddled out of the ward.

THAT CERTAIN GLOW

That fellow who never seems to have matches may soon be able to stop asking others for them. The prospects all depend on a machine being built by the American Machine and Foundry Company for the Continental Tobacco Company. The unit is designed to tip the cigarettes with Continental's combustible formula.

The smoker lights up by simply applying the cigarette tip to a striking surface on the package.



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For gentle diuresis

In mild to moderate decompensation, DIAMOX closely matches diuretic action to diuretic needs. Gentle removal of water is achieved without distorting normal electrolyte ratios. A single morning dose provides comfortable, self-limiting daytime action and nighttime rest. Tablets of 250 mg. Parenteral, vials of 500 mg.

Request complete information on indications, dosage, precautions and contraindications from your Lederle representative, or write to Medical Advisory Department.

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Editor's Choice

Abstracts of articles concurrent with publication in leading specialty journals

PATIENCE OUTWITS BIZARRE FORMS OF THYROTOXICOSIS

The diagnosis of hyperthyroidism offers little difficulty when the patient presents typical symptoms. However, occasionally the signs may be so bizarre and misleading that the physician is deceived. Severe abdominal pain, gross edema without cardiac, renal or liver failure, stubborn or recurrent bursitis, and even periodic paralysis, may be among the unusual manifestations of hyperthyroidism. Skeletal demineralization, epilepsy and encephalopathy have also been evoked by excessive thyroid activity.

The diagnosis can be established in a number of ways. Usually an adequate appraisal of thyroid function can be gained by tracer uptake studies or by total serum iodine or protein-bound iodine determinations. In the occasional patient, or when indicated for some particular reason, other procedures such as thyroid suppression tests may be employed. The standard BMR procedure still remains a useful and readily available means of assessing thyroid activity. *Chapman; Am. Prac., Aug. 1961, pp. 573-80.*

ACCIDENT AT HIGH SPEED CAUSES AORTIC RUPTURE

In this era of high-speed travel, rupture of the aorta is becoming more common and can be expected to occur even more frequently. Both on the highway and in the air, such traumatic lesions may arise either from direct accident or, as in the case of air travel, from abrupt stops and starts when the passenger is subjected to large G-forces.

The major handicap to successful salvage of patients with a ruptured aorta has risen from failure to recognize the condition during early examination, or from delay while the physician waits for the defect to define itself. But the life of a patient with a torn aorta is measured in minutes, and instant recognition of the trauma spells the difference between life and death.

The injury frequently results from direct contact with the steering wheel or instrument panel, or from being thrown from the vehicle. The rupture is due to direct force on the chest or to gravitational forces which literally pull the aorta apart with the weight of the heart. In pinning down the nature of a traumatic injury, it is therefore of critical importance to determine just what forces did come into play, the rate of travel of the vehicle, where the patient sat and whether the vehicle fell or rolled, as well as the immediate post-accident situation. Routine history, physical examination and the remainder of the work-up should be completed in an hour, for if surgery is performed within that time, there is considerable chance of saving the patient. *Nettleship and Finfrock; AMA Arch. Surg., Aug. 1961, pp. 85-89.*

CEREBRAL CONCUSSION BROUGHT ON BY FIT OF COUGHING

While it's not uncommon for a patient to cough until he's blue in the face, it is something of a medical oddity when he "hacks" his way into a complete blackout. Among 18 such cases studied, five literally induced syncope at will by simply coughing.

An extensive study of the phenomenon—including electroencephalograms, measurement of intra-arterial pressures, and determination of gravity effects in a gravity suit—indicates that it is most likely attributable to a concussion-like effect due to rapid rise in cerebrospinal fluid pressure. Large rises in cerebrospinal fluid pressure have been recorded during such spells. The concussion mechanism applies for the most part to loss of consciousness after only one or a few coughs. However, it may also hold true in some episodes of sustained coughing. The effect is known to occur after frequent rapid blows of low severity.

The EEG patterns following loss of consciousness are compatible with those registered immediately after concussion. The accompanying apnea tends to substantiate this conclusion, as do the observed post-ictal confusion and retrograde amnesia. On the other hand, blood pressure changes in these patients do not parallel those found in animals with concussion. The studies therefore document the fact that rapid loss of consciousness may occur prior to detectable decline in peripheral blood pressure. *Kerr and Eich; AMA Arch. Int. Med., Aug. 1961, pp. 80-84.*

ANTIBODIES TO COLON TISSUE PRODUCE ULCERATIVE COLITIS

It appears that colitis may result from auto-immunization. Antigen prepared from dog colon produced specific antibodies after intraperitoneal injection into rabbits and ducks. When dogs were then injected with anti-colon antibodies, they developed a disease similar to that encountered clinically, even to the pattern of remissions and exacerbations.

The demonstration of circulating antibodies to the colon is not in itself sufficient proof that human ulcerative colitis reflects an auto-immune process. But the experimentally induced lesions suggest this possibility, as well as the following hypothesis of the pathogenesis of ulcerative colitis: Infection, ischemia or trauma cause destruction of colonic tissues. Colonic protein then enters the circulation, initiating the formation of specific antibodies. These antibodies, in turn, further destroy remaining colonic tissues, setting up a vicious cycle.

There is, however, one disconcerting element in the picture. If the auto-immunization theory is valid in this condition, how can one account for the familial incidence occasionally noted with ulcerative colitis? One possible explanation for the transmission of this and other auto-immune conditions is the chance of intrauterine development of such sensitivity which finally is passed on as a Mendelian recessive. *LeVeen, Falk and Schatman; Ann. Surg., Aug. 1961, pp. 275-80.*

DIGITALIS TOXICITY MORE FREQUENT THAN SUSPECTED

The exact frequency of digitalis toxicity has not previously been determined. But the increasing number of reports of such adverse effects have suggested that the complications of this therapy are sufficient to warrant repeated, careful examination of all digitalized patients.

In two earlier studies, the incidence of digitalis toxicity had been found to be considerably higher than suspected. Consequently, all digitalized patients at the Coral Gables, Fla., VA Hospital were checked daily for a 12-month period. Among 88, there were 92 episodes of cardiotoxicity. In 61, diuresis

with resultant electrolyte imbalance was found to be the most common precipitating factor. The role of rapid diuresis in such crises had previously been reported at 20-37 per cent among those who developed digitalis toxicity following vigorous diuretic treatment. Recent studies have demonstrated that this adverse reaction is due to increased potassium excretion.

Chronic renal failure was a contributing factor in 15 cases, and myocardial infarction in 12. Pulmonary complications (specifically cor pulmonale and chronic lung disease with or without cor pulmonale) were apparently a precipitating element in 22.

Digitalis remains unique in that the therapeutic-to-toxic ratio is less than with many other drugs—in fact it narrows precipitously for those with advanced heart disease. Thus, individualization of the regimen is of prime importance. The concept of "pushing" digitalis until signs of toxicity develop in order to assure full digitalization, is probably dangerous. Indeed, bigeminy, which is a frequent early sign of digitalis intoxication, may be life-threatening. *Rodensky and Wasserman; AMA Arch. Int. Med., Aug. 1961, pp. 3-20.*

ORAL MEDIA ARE BEST FOR GALLBLADDER EXAMINATION

Despite the development of intravenous contrast media, oral cholecystography remains the method of choice in gallbladder examination. This technique has undergone repeated modifications since its introduction in 1924 and is now one of the most reliable of radiologic exams.

The records of 543 consecutive cholecystographic examinations corroborate the degree of accuracy reported for the technique. In this series, 61 were found to have definite abnormalities. The diagnosis was confirmed in 28 who underwent surgery. Of 57 patients whose tests indicated poor or equivocal function, gallbladder disease was found in 17 who subsequently had surgery.

As far as could be ascertained, none of the cases considered positive or equivocal by cholecystography were normal or negative at either operation or autopsy. *Shoss; Am. Prac., Aug. 1961, pp. 582-87.*

DOCTOR'S BUSINESS

The new increase in Social Security benefits, making it possible for men to retire at age 62, will affect doctors in several ways: the change brings an increase in Social Security taxes for office staffs. Employers' contribution this year is three per cent of their employees' first $4,600 of income. Next year it goes up to 3⅛ per cent; 1966-67, 4⅛ per cent; 1968, 4⅝ per cent. That's the current timetable. But Congressional leaders are seriously considering a proposal from the Social Security Board to up the taxable base from $4,600 to $6,000, then to $9,000.

New surge in the birth rate is keeping doctors busy around the country. More babies were born during the first third of the year than in any four-month period in the nation's history. Total registered births reached the all-time high of 1,382,000; 42,000 more than the same period last year. Experts predict that within five years, the annual birth rate may reach 6,000,000—far more than the number recorded in the years following World War II.

There's good reason why office space in suburban areas is somewhat harder to locate than in downtown sections. According to the National Association of Real Estate Boards, the vacancy rate is two per cent or less in 40 per cent of the office buildings in suburbia. An additional 25 per cent have only three to five per cent vacancies. In town, the top locations are about as crowded. But city doctors who don't mind being on a side street will find office space much more readily available, says the Association.

Easier financing for adding a room or otherwise improving a home is now available through FHA-insured loans. A new law makes it possible to put up to $10,000 into home improvement with no down payment and 20 years to pay at a maximum six per cent interest rate. Repayments on a 20-year loan run $7.17 per month for each $1,000 borrowed. Adopting this financing arrangement for adding or converting a room for part-time consultation purposes may be possible, depending on local FHA practice. But officials urge doctors to get an OK from the nearest FHA office before going ahead with construction designed for professional purposes.

Food and lodging on a bona fide trip for convalescence have been ruled not deductible on the Federal income tax by the Second U. S. Court of Appeals. The ruling is a sharp rebuff to the many tax experts who have long argued that because the law does not specifically disallow living costs on medically recommended trips, they ought to be permitted. The court's decision hinges on its interpretation of the Internal Revenue Code of 1954. While this code makes provisions for "medical care" and for "transportation primarily for and essential to medical care" as deductible items, the court points to another of its provisions: "No deduction shall be allowed for personal living or family expenses."

One of the big brokerage houses reports that 1,108 common stocks—practically the entire list on the New York Exchange—rose by an aggregate of 11,903 points during the first six months of this year. In all, they gained more than $66 million in value, based on peak quotations for the period. Seven stocks showed gains of from 100 to 253 per cent. The strongest industry groups were the cigarette shares, up 33 per cent, and the rubber shares, up 23 per cent. Biggest losers were the electrical equipment makers, whose shares dropped 14 per cent.

A new ambulance directory, listing almost 4,000 private ambulance operators in the U. S. and Canada, has just been published under the auspices of the California Ambulance Association. It's available from the publisher, Albert Carriere, Inc., N.A.D. Division, 332 South Michigan Avenue, Chicago 4, Ill. Price: $5 a copy.

The VA Department of Medicine and Surgery is seeking applicants from this year's crop of college and university graduates. Many of its 170 hospitals and 91 out-patient clinics report vacancies in these ten areas: psychology, nursing, dietetics, clinical social work, occupational therapy, physical therapy, corrective therapy, libraries, recreation, and medical technology. Details are available from personnel offices in any VA hospital or clinic, or by writing: Department of Medicine, Veterans Administration, Central Office, Washington 25, D. C.

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NEWS

vertigo is reversible

Antivert® stops vertigo

moderate to complete relief of symptoms in 9 out of 10 patients[1]

Prescribe one ANTIVERT tablet (or 1-2 teaspoonfuls ANTIVERT syrup) 3 times daily, before each meal, for prompt relief of vertigo, Meniere's syndrome and allied disorders. Side effects are short-lived, usually only harmless flushing and tingling associated with vasodilation. As with all vasodilators, ANTIVERT is contraindicated in severe hypotension and hemorrhage.

Supplied: Small blue-and-white scored tablets (meclizine HCl 12.5 mg. and nicotinic acid 50 mg.) in bottles of 100. Syrup (each 5 cc. teaspoonful contains meclizine HCl 6.25 mg. and nicotinic acid 25 mg.) in pint bottles. Prescription only. Bibliography available on request.

Reference: 1. Scal, J. C.: Eye Ear Nose & Throat Month. **38**:738 (Sept.) 1959.

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five-factor geriatric supplement

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Product News

VITAMIN DEFICIENCY

Bejex (Abbott) is a new injectable combination of vitamins B-complex and C for treatment of nutritional deficiencies resulting from poor alimentary tract absorption or chronic disease.

Packaged in a two-compartment 5 ml *Univial,* with diluent in the upper portion and lyophilized solids in the lower portion, *Bejex* is reconstituted by pressing on the stopper. It can be administered either intramuscularly or intravenously in doses ranging from 1 to 5 ml.

HORMONE GENEALOGY

Steroid Dial, designed by Syntex, explains the family relationships of a group of frequently used hormone compounds by means of a dial. The upper disc on the dial shows the structural formula of the basic molecule with cutout areas that reveal the structural differences between the hormones, and their therapeutic categories. When the arrow on the upper disc points to the name of a compound on the rim of the lower disc, the specific modifications which distinguish that steroid, and the category to which it belongs, appear in the cutout areas around the basic molecule. The dial is available from Syntex Laboratories, 10 East 40th St., New York 16, N. Y.

FOR ANGINA

Nitrased (Lemmon) contains 0.4 mg nitroglycerin in the sugar coating of each tablet and 15 mg each of pentaerythritol tetranitrate and secobarbital sodium in the inner core. It is indicated for prompt relief of acute attacks of angina pectoris as well as sustained relief of symptoms. *Nitrased* is also designed for management of coronary insufficiency and post coronary convalescence.

As with all nitrate preparations, headaches of varying severity may occasionally occur. *Nitrased* should be given with caution to patients with marked anemia, increased intraocular or intracranial pressure or syncope.

For acute attacks of angina, dosage is one tablet placed under the tongue for one minute, then swallowed. For prophylaxis, one tablet should be swallowed four times daily.

Names in the News

Dr. Findlay C. Crowe has given up private practice to become associate medical director of Pfizer Laboratories, division of Chas. Pfizer & Co. His new duties involve professional services to physicians and medical aspects of product development and marketing.

Dr. Jerome S. Tobis, first vice-president of the American Congress of Physical Medicine and Rehabilitation, has been named chief of the newly created division of physical medicine at Montefiore Hospital, Bronx, New York.

Col. Charles H. Moseley, a specialist in preventive medicine, has been named executive secretary of the Armed Forces Epidemiological Board in Washington, D.C. Composed of civilian physicians and scientists, the Board advises the Surgeons General of the Army, Navy and Air Force on research in infectious diseases and injuries affecting military personnel.

Dr. Bayard T. Horton, emeritus professor of medicine in the Mayo Foundation Graduate School, University of Minnesota, and the first to describe temporal arteritis, in 1932, is the new president of the American Association for the Study of Headache.

Dr. Kenneth C. Swan, professor of ophthalmology at the University of Oregon Medical School, has become an editorial board member of the new journal, *Investigative Ophthalmology* to be published bi-monthly by the Association for Research in Ophthalmology.

Dr. Floyd Feldmann, an authority on tuberculin testing and related matters, resigned as research director of the American Thoracic Society to become an assistant professor in the department of public health, Cornell University College of Medicine, New York.

Dr. Charles W. Bair, has been named General Practitioner of the Year by the Pennsylvania Medical Society. A native of Quarryville, Pa., and chief of the outpatient clinic at Lancaster General Hospital, Dr. Bair will receive the GP award in October at the Society's next annual meeting.

Dr. Carl W. Gottschalk is the 11th medical scientist to be awarded the lifetime post of Career Investigator by the American Heart Association. An associate professor at the University of North Carolina School of Medicine, Dr. Gottschalk is investigating renal physiology and its relation to the circulatory system.

Dr. John M. McKibbin has been named professor and chairman of the department of biochemistry, University of Alabama Medical Center, Birmingham.

Dr. Henrik Johansen and **Dr. Martin B. Jörgensen** shared the first American-Danish Oticon Corporation grant of 10,000 kroner (about $1,445) for research in otology. Dr. Johansen, chief of ENT at Military Hospital, Copenhagen, developed a series of plastic earplugs to prevent noise injuries among military personnel, while Dr. Jörgensen, of State Hospital's University Clinics, has shown that diabetic angiopathy may attack inner ear vessels, producing sudden hearing loss.

Dr. John M. Waugh of the Mayo Clinic is president, and **Dr. Walter G. Maddock,** Chicago, Ill., is president-elect of the newly named Society for Surgery of the Alimentary Tract, formerly called the Association for Colon Surgery.

Dr. Hiram E. Essex, emeritus professor of physiology of the Mayo Foundation for Medical Education and Research, is the president of the National Society for Medical Research. This organization, which promotes public understanding of medical research, is maintained by 670 parent societies and institutions, including the AMA.

Dr. John C. Hume has been appointed professor of public health administration at the Johns Hopkins University School of Hygiene and Public Health. Former chief of the health division of the United States Technical Cooperation Mission to India, Dr. Hume's main interest is eradication of malaria and control of venereal disease.

Dr. Austin B. Chinn, associate professor of medicine, Western Reserve University, Ohio, has been named associate dean of the medical school.

First woman to be named as a full professor at Yale University School of Medicine is **Dr. Dorothy M. Horstmann.** An authority on poliomyelitis and a member of the Yale faculty since 1943, Dr. Horstmann's title is professor of epidemiology and pediatrics.

Dr. Philip Thorek, professor of surgery at Cook County Hospital Graduate School of Medicine, Chicago, received a "Minerva," the highest award given by the International Festival on Scientific Films, for his film *If I Had an Ulcer.* Prepared under a grant from Warner-Chilcott Laboratories, the educational movie for physicians was cited for "technical contents, clearness of exposition and the perfect manner in which it has been accomplished."

Walter James McNerney, aged 36, director of the Bureau of Hospital Administration, University of Michigan, has become president of the national Blue Cross Association. A two volume *Study of Hospital and Medical Economics,* resulting from research he directed, will be published this fall by the Educational Trust of the American Hospital Association, Chicago, Ill.

OBITUARIES

Dr. Henry Zachariah Pratt, 97, oldest living graduate (1887) of Albany Medical College; he once remarked, "Youth is so engrossed in the struggles and pleasures of life that it overlooks living itself;" July 25, in Albany, New York.

Dr. Vernon P. Thompson, 63, orthopedic surgeon and former professor at the University of California Medical School; July 22, in Los Angeles.

Dr. Charles E. North, 91, applied Koch's bacteriology principles at the turn of the century and practically elimated infant mortality caused by raw milk; discovering that cleanliness of milking techniques and equipment are more important than clean barns, he revolutionized the sanitary standards of the nation's dairies; July 27, in Montclair, New Jersey.

Dr. Lawrence J. Lawson, 65, associate professor of otolaryngology at Northwestern University Medical School; he was a past president of the Chicago Laryngological and Otological Society; July 11, in Kenilworth, Illinois.

Dr. Kal Freireich, 50, an internist; he was on the teaching staff of New York Medical College; July 10, in Manhasset, Long Island.

Where's the arthritic this morning?

Thanks to Medrol Medules, he woke up comfortable and he's already on the go.

The first long-acting oral steroid, Medrol Medules gives the arthritic patient therapeutic action that continues through the night. In many cases, morning stiffness can become a thing of the past.

The slow, steady release of methylprednisolone often provides greater effectiveness, with less frequent administration and sometimes a reduced total daily dosage.

Many of your arthritic patients, too, can wake up comfortable on Medrol Medules.

Dosage: The following dosages are recommended in rheumatoid arthritis:

	Initial	*Maintenance*
Severe	12 to 16 mg.	6 to 12 mg.
Moderately severe	8 to 10 mg.	4 to 8 mg.
Moderate	6 to 8 mg.	2 to 6 mg.
Children	6 to 10 mg.	2 to 8 mg.

With Medrol Medules, it may be possible to reduce the total daily dose by ⅓.

Indications and effects: Medrol benefits (anti-inflammatory, antiallergic, antirheumatic, antileukemic, antihemolytic) have been demonstrated in acute rheumatic carditis, rheumatoid arthritis, asthma, hay fever and allergic disorders, dermatoses, blood dyscrasias, and ocular inflammatory disease involving the posterior segment.

Precautions and contraindications: Because of Medrol's high therapeutic ratio, patients usually experience dramatic relief without developing such possible steroid side effects as gastrointestinal intolerance, weight gain or weight loss, edema, hypertension, acne, or emotional imbalance.

As in all corticotherapy, however, there are certain cautions to be observed. The presence of diabetes, osteoporosis, chronic psychotic reactions, predisposition to thrombophlebitis, hypertension, congestive heart failure, renal insufficiency, or active tuberculosis necessitates careful control in the use of steroids. Like all corticosteroids, Medrol is contraindicated in patients with arrested tuberculosis, peptic ulcer, acute psychoses, Cushing's syndrome, herpes simplex keratitis, vaccinia, or varicella.

Approximately 135 tiny "doses" mean smoother steroid therapy

Each capsule contains:
Medrol (methylprednisolone) 4 mg.
Supplied in bottles of 30 and 100.

Medrol* Medules*

Upjohn 75th years

JUNE, 1961 THE UPJOHN COMPANY, KALAMAZOO, MICHIGAN

Letters to the Editor

Professional Association

You recently had an article (MWN, June 23, *Outlook*) describing the new American Association of Professions. Can you give me the address of the first chapter in Michigan, or any other information about this organization?

RICHARD M. GLADDING, M.D.
Lehighton, Pa.

[The scores of physicians who have written about the American Association of Professions can obtain complete information from Mr. Hugh Brenneman, Public Relations Director, Michigan State Medical Society, 120 W. Saginaw, East Lansing, Mich.—ED.]

Physician for Tower

In a recent issue (MWN, June 23, "Where Your Congressmen Stand on Health Care for the Aged"), Sen. John G. Tower (R-Tex.) was listed as having "declined to give position." As one of the "Physicians for Tower," I was disturbed by this, and wrote to him regarding his stand.

We are proud of Senator Tower, and feel that he is a little "Senator Goldwater," so I hope you will correct this in a future issue of MEDICAL WORLD NEWS.

WARREN B. POOLE, M.D.
Lubbock, Tex.

[*See below.*—ED.]

Senator Tower Replies

I believe that medical care for those unable to care for themselves should be provided by local charitable organizations and city-county hospital and medical services. Because cradle-to-grave care by government can be provided only at the expense of individual liberty. I am opposed to any compulsory health programs.

JOHN G. TOWER
United States Senate
Washington, D. C.

State Approval

You recently ran an article entitled "Tranquilizer Given State Seal of Approval," (MWN, June 23). The findings reported in this article closely parallel my own experience as the medical director of the Danville Clinic of the Division of Alcohol Studies and Rehabilitation, though I am constantly faced with skepticism by those who look upon *Librium* as just another tranquilizer.

L. H. CALISCH
Department of Health
Commonwealth of Virginia
Danville, Va.

We are very much interested in the articles "Tranquilizer Given State Seal of Approval" and "Any Alert, Well-Trained GP Can Treat Alcoholics."

Is it possible for us to have a copy in our files to be used as reference material in working in this area.

EDITH M. DAVIS
Department of Mental Health
Commonwealth of Kentucky
Lexington, Ky.

For the Record

In a news report (MWN, July 21, "Two Safe Sedatives") you imply that I reported on a new sedative at the third World Congress of Psychiatry. This I did not do.

The article also stated that I have treated 2,000 people with this drug. This is inaccurate, although I have had considerable experience with it over a two-year period. Finally, I am quoted, "But with this substance you will never have a death or major treatment problem on your hands." I am sure that you realize that no physician could make such a generalized statement and I certainly did not make such a comment.

FRANK J. AYD, JR., M.D.
Baltimore, Md.

Pain in the Low Back

Dr. J. Harold Brown's discussion (MWN, May 26, "One Shot for Low Back Pain") was most interesting, especially in view of the frequency with which we are faced with these perplexing pathologies. I would humbly suggest, however, that Dr. Brown conduct a similar survey on patients upon whom manipulation alone was employed.

The overwhelming majority of patients with low back disability will respond to simple manipulation in three to five days, without subjecting the patient to the somewhat more serious procedure of epidural injection.

I do not, of course, imply this to be a panacea for herniated nucleus pulposus and obvious surgical problems. However, the success of manipulation over the past 60-70 years on the majority of low back problems should certainly lead an intelligent unbiased physician to agree with Dr. Brown that the number of surgeries now being done on the low back can be materially reduced.

DONALD E. WAITE, D.O.
Columbus, Ohio

In your magazine, Dr. Harold Brown proposed a new and conservative approach using caudal injections.

More than 26 years ago, when I embarked on my orthopaedic residency at the New Jersey Orthopaedic Hospital, this exact type of caudal therapy and manipulation was routine for backaches. The results then, as now, using normal saline or 1:7000 procaine solution, were no different from those reported by Dr. Brown. And we have occasionally added corticosteroids to the solution.

"There is nothing new under the sun."

MARTIN DOBELL, M.D.
Cape Canaveral Clinic
Cocoa Beach, Fla.

EDITORIAL

BRITISH NATIONAL HEALTH SERVICE

Morris Fishbein, M.D.

Just available from Great Britain is the first in a series of pamphlets prepared by John and Sylvia Jewkes. This first publication deals with the National Health Service. Others will examine the medical systems of Britain, the U.S., Canada, New Zealand and Switzerland.

Professor Jewkes, who holds the Chair of Economic Organization in the University of Oxford and was a member of the Royal Commission on the Remuneration of Doctors and Dentists, and his wife find that many Britons believe that medical services in the U.S. are so expensive that nobody can afford to be ill. And, "conversely, there are many Americans who talk of British 'socialized medicine' as a system in which hordes of patients, broken in spirit, resignedly accept heartless treatment from a medical profession degraded and humiliated by a ruthless government department —a picture which, of course, most English people find wholly ludicrous."

Comparison with U. S.

After carefully noting the conditions in England and in the U.S. before and after the beginnings of the National Health Service, the Jewkes' say, "It is difficult to escape the conclusion that in the U.S. the quantity of medical services available is larger and is tending to increase more rapidly than in Britain." In 1939, they point out, Great Britain was more amply supplied with hospital beds than the U.S. But England has built few hospitals since 1947 while, under the Hill-Burton Act, the U.S. has averaged 150 new hospitals each year. And since 1921, the number of American physicians per thousand population has consistently been higher than in Great Britain.

Perhaps the only place in which Britain excels in personnel is with nurses. In relation to population there have always been more in England.

Professor Jewkes is particularly critical of the administration of the National Health Service which, in seeking to impose a "central pattern and purpose" on the medical services as a whole, has built up a complex hierarchical administrative structure which, in its turn, is now being criticized as productive of delay and confusion. Conversely, many recent reports have stressed the virtues of slow and organic growth, and of smaller and heterogeneous groupings, and warned of the danger that too firm a grip of policy at the center may enfeeble actions at the periphery.

Most important in this paper, however, is the discussion of the economics of medical services. Medical services in Great Britain continue to be purchased privately, and about one half of all the pharmaceutical products consumed are purchased privately. Voluntary health insurance has grown rapidly in Great Britain because people are ready to make sacrifices in other directions in order to enjoy prompt hospital and specialist treatment, free choice of specialists, and private accommodations.

Finally, the Jewkes' suggest that the National Health Service may have "positively hindered the growth of British medical service."

On this the editor of the *British Medical Journal* comments, "We may or may not agree with this, but at least the remark comes as a challenge to those who boost Britain's National Health Service as if it were one of the most remarkable things that has happened in the twentieth century. The same unctuous self-praise—that the National Health Service is an example to the world—may well be 'the kind of pretentious claim likely to be indulged in by a power which finds its place in the world slipping, does not relish it, and seeks compensation in national day-dreaming.' "

Morris Fishbein